Conference Group for Central European History of the American Historical Association

Cambridge University Press

What Research, to What End? The Rockefeller Foundation and the Max Planck Gesellschaft in

the Early Cold War Author(s): Carola Sachse

Source: Central European History, Vol. 42, No. 1 (Mar., 2009), pp. 97-141

Published by: Cambridge University Press on behalf of Conference Group for Central European

<u>History of the American Historical Association</u> Stable URL: http://www.jstor.org/stable/20457427

Accessed: 16-10-2015 04:20 UTC

REFERENCES

Linked references are available on JSTOR for this article: http://www.jstor.org/stable/20457427?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Conference Group for Central European History of the American Historical Association and Cambridge University Press are collaborating with JSTOR to digitize, preserve and extend access to Central European History.

http://www.jstor.org

Central European History 42 (2009), 97–141.

Copyright © Conference Group for Central European History of the American Historical Association

doi:10.1017/S0008938909000041 Printed in the USA

What Research, to What End? The Rockefeller Foundation and the Max Planck Gesellschaft in the Early Cold War

Carola Sachse

Between 1946 and 1948, the Rockefeller Foundation (RF) sent four representatives to Germany for extended visits to investigate how it could become involved in reconstructing the country. They were particularly interested in reorganizing the educational and science systems in a democratic manner and in reintegrating the conquered aggressor into the "family of nations." They held numerous meetings with leading representatives of the Max Planck Gesellschaft (MPG), the successor to the world-famous Kaiser Wilhelm Gesellschaft (KWG), which had received considerable amounts of funding from the RF until the late 1930s, even after the Nazis came to power. As a result of its evaluation, the RF declined to provide the same level of support for the postwar MPG as it had for the prewar KWG. Although an obvious reason for the RF to distance itself from the KWG would be the latter's involvement in the crimes of the Nazi regime, as suggested by Paul Weindling in his analysis of the RF's funding policy for biomedical research in Germany in general, ¹ neither the RF interviews nor the evaluation

The original research for this article was generously supported by the MPG research program "History of the Kaiser Wilhelm Society in the National Socialist Era" which was overseen by Reinhard Rürup and Wolfgang Schieder. The finalization and especially the translation costs were supported by the Faculty for History and Cultural Sciences, University of Vienna. I would like to thank the archivists of the Rockefeller Archive Center, Sleepy Hollow, NY, and the Archives of Max Planck Society, Berlin. They most effectively helped me excavate the relevant materials. For several months in 2007 and 2008, I enjoyed the extraordinary services of the library of Max Planck Institute for the History of Science and the most fruitful discussions within the Berlin School for Comparative European History, Free University of Berlin. Earlier versions of this paper were presented at the German Studies Association's Annual Conference 2005 in Milwaukee, Wisconsin, and the Initiativkolleg "The Sciences in Historical Context" at the University of Vienna. For critical comments in these and further contexts I am particularly grateful to Young-sun Hong, Konrad H. Jarausch, Jan Müggenburg, Volker Berghahn, Arnd Bauernkämper, Kenneth F. Ledford, and two anonymous readers. I would like to thank Sorcha O'Hagan for the translation, Ina Heumann and Christian Forstner for reseach assistance, and Gayle Godek for extensive editorial work.

¹Paul Weindling, "Out of the Ghetto': The Rockefeller Foundation and German Medicine after the Second World War," in *Rockefeller Philanthropy and Modern Biomedicine: International Initiatives from World War I to the Cold War*, ed. William H. Schneider (Bloomington: Indiana University Press, 2002), 208–222; Paul Weindling, "The Rockefeller Foundation and German Biomedical Sciences,

reports mentioned the involvement of KWG scientists in biomedical crimes during the Third Reich.² The reports did not even mention the Nuremberg medical trial, which took place between December 1946 and August 1947.³

In fact, the RF emissaries, who took a relatively positive view of the KWG's scientific potential, interceded with the American military government several

1920–40: From Educational Philanthropy to International Science Policy," in Science, Politics, and the Public Good: Essays in Honour of Margaret Gowing, ed. Nicolaas A. Rupke (Basingstoke: Macmillan Press, 1988), 119–140. Similarly and most recently Michael Schüring, Minervas verstoßene Kinder. Vertriebene Wissenschaftler und die Vergangenheitspolitik der Max-Planck-Gesellschaft (Göttingen: Wallstein Verlag, 2006), 328.

²The involvement of KWG researchers in biomedical crimes during the "Third Reich" was recently investigated in the research program "History of the Kaiser Wilhelm Society in the National Socialist Era." See the series Reinhard Rürup and Wolfgang Schieder, eds., Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus (Göttingen: Wallstein Verlag, 2000 ff.), in particular the volumes of Hans Walter Schmuhl, ed., Rassenforschung an Kaiser-Wilhelm-Instituten vor und nach 1933 (Göttingen: Wallstein Verlag, 2003); Hans Walter Schmuhl, Grenzüberschreitungen. Das Kaiser-Wilhelm-Institut für Anthropologie, menschliche Erblehre und Eugenik 1927-1945 (Göttingen: Wallstein Verlag, 2005); Carola Sachse, ed., Die Verbindung nach Auschwitz. Biowissenschaften und Menschenversuche an Kaiser-Wilhelm-Instituten (Göttingen: Wallstein Verlag, 2003); Alexander von Schwerin, Experimentalisierung des Lebens. Der Genetiker Hans Nachtsheim und die vergleichende Erbpathologie 1920–1945 (Göttingen: Wallstein Verlag, 2004). Benno Müller-Hill's book was revolutionary on this subject in 1984: Benno Müller-Hill, Tödliche Wissenschaft. Die Aussonderung von Juden, Zigeunern und Geisteskranken 1933-1945 (Reinbek: Rowohlt, 1984) (English: Murderous Science: Elimination by Scientific Selections of Jews, Gypsies, and Others in Germany, 1933-1945, 2nd ed. (New York: Cold Spring Harbour Laboratory Press, 1998). For a condensed overview of the international historiography on this overall area (ca. 1970 to 2000), see Carola Sachse and Benoit Massin, "Biowissenschaftliche Forschung an Kaiser-Wilhelm-Instituten und die Verbrechen des NS-Regimes. Informationen über den gegenwärtigen Wissensstand," in Ergebnisse 3. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2000).

³In his research, Weindling also found no definite recursion on the part of the RF in the Nuremberg Medical Trial, at which admittedly no KWG researchers were accused. Weindling, "Out of the Ghetto," 209, 210, and 215. On the Nuremberg Medical Trial, see Angelika Ebbinghaus and Klaus Dörner, eds., Vernichten und Heilen. Der Nürnberger Ärzteprozess und seine Folgen (Berlin: Aufbau-Taschenbuch-Verlag, 2002). One former RF-grant recipient, the malaria researcher Claus Schilling from the Robert Koch Institute in Berlin was accused because of unethical medical experiments in the concentration camp Dachau; he was sentenced to death in the first Dachau trial in December 1945 and executed in May 1946; Gerhard Rose, who followed him in 1936 as director of the department for tropical medicine in that institute was in contact with the RF, too; he was accused in the Nuremberg Medical trial because of his typhus experiments in Buchenwald and went to prison for several years. Eugen Haagen, who, in 1931 through 1933, did research on yellow fever within the RF's International Health Division, acted as a witness in that trial and was himself sentenced to prison in 1952 because of his criminal experiments in the concentration camp Natzweiler: see Annette Hinz-Wessels, Das Robert Koch-Institut im Nationalsozialismus (Berlin: Kulturverlag Kadmos, 2008), 50, 59-71, 116, 131-134, 143-146. For an international comparison of human experiments in the twentieth century, see Gerhard Baader, Susan E. Lederer, Morris Low, Florian Schmaltz, and Alexander v. Schwerin, "Pathways to Human Experimentation, 1933-1945: Germany, Japan, and the Unites States," in Politics and Science in Wartime: Comparative International Perspectives on the Kaiser Wilhelm Institutes, ed. Carola Sachse and Mark Walker, Osiris 20 (Chicago: University of Chicago Press, 2005), 205-231; and Wolfgang U. Eckart, ed., Man, Medicine, and the State: The Human Body as an Object of Government Sponsored Medical Research in the 20th Century (Stuttgart: Steiner Verlag, 2006).

times on the KWG's behalf. At the same time, the RF's interviewers and the KWP/MPG interviewees were both pursuing their own individual agendas—attempting to position their organizations in the new world order of the Cold War. The records actually deal more with the protagonists' concerns about their own future position than with the experiences of the recent Nazi past. At the start of the 1950s, this jockeying for position meant that instead of moving closer together again, the RF and the KWG/MPG were moving farther apart.

This article will reconstruct the process of how these organizations moved together and apart. Initially it will focus on two issues: what had brought these two eminent organizations together between the two world wars, and how, if at all, the representatives of the RF and the KWG/MPG reflected on their relationships with the Nazi regime (which in some ways had overlapped) after World War II. Finally, I will interpret the events from a transnational perspective in the global context of the Cold War.

I take this approach for several reasons. First, the two institutions were and are nationally based, in the U.S. and Germany, respectively. But ever since its foundation, the RF has seen itself as a "global player" that attempts to ignore "flags and boundaries," while the KWG justified its position as the leading national scientific organization mainly through its international standing and recognition for its scientific achievements. Both organizations incorporated considerations beyond their own national context into their self-images, affecting their behavior. Second, science—especially top-class natural science research—is always a supranational activity that can be promoted or hindered by the general political situation but rarely prevented altogether. It is supranational not only with regard to international scientific organizations and conferences, but also because of the continual reception and demarcation of scientific projects, methods, and results in different countries, and the communication, interaction, and competition among scientists in different countries. Third,

⁴This account is based on the outline by Klaus Kiran Patel, "Transnationale Geschichte. Ein neues Paradigma?," in H-Soz-u-Kult 2.2.2005 http://hsozkult.geschichte.hu-berlin.de/forum/id=573& type=diskussionen, and Jürgen Osterhammel, "Transnationale Gesellschaftsgeschichte. Erweiterung oder Alternative?," in *Geschichte und Gesellschaft* 27, no. 3 (2001): 464–479. See also Jessica C. E. Gienow-Hecht and Frank Schumacher, eds., *Culture and International History* (New York: Berghahn Books, 2003); and Gunilla Budde, Sebastian Conrad, and Oliver Janz, eds., *Transnationale Geschichte. Themen, Tendenzen und Theorien* (Göttingen: Vandenhoeck & Ruprecht, 2006). For science funding from an international perspective, see Giuliana Gemelli and Roy MacLeod, eds., *American Foundations in Europe: Grant-Giving Policies, Cultural Diplomacy, and Transatlantic Relations, 1920–1980* (Brussels: PIE Lang, 2003); John Krige and Kai-Henrik Barth, eds., *Global Power Knowledge: Science and Technology in International Affairs*, Osiris 21 (Chicago: University of Chicago Press, 2006), and Helke Rausch, "US-amerikanische 'Scientific Philanthropy' in Frankreich, Deutschland und Großbritannien zwischen den Weltkriegen," *Geschichte und Gesellschaft* 33, no. 1 (2007): 73–98. On the relationship between the natural sciences and the nation, see Ralph Jessen and Jacob Vogel, eds., *Wissenschaft und Nation in der europäischen Geschichte* (Frankfurt am Main: Campus, 2002).

one of the determining factors in the relationship between the RF and the KWG was their mutual perceptions of each other and how each integrated the other's actual or perceived perception of them into their own strategies. Finally, the events, necessarily transatlantic, largely took place in a physical area that was, geographically, within the political boundaries of the former German Reich; its unity as a nation-state had, however, been destroyed and its new condition as a divided nation-state was still being negotiated, a process in which these discussions about science policy played a part. Of course, the KWG/MPG and the RF had no equal footing in this dialogue. Their transnational interactions portrayed here took place under the specific conditions of the allied rule over Germany as a conquered aggressor. How far these interactions expressed moments of a "consensual hegemony," as scholars have recently described American science policy in postwar Europe, remains to be seen.⁵

Philanthropy's Increasing Focus on Science or the Rationalization of Life

To this day, the Rockefeller Foundation's stated, immodest goal is "to promote the well-being of mankind throughout the world." John D. Rockefeller established the Foundation in 1913 as an addition to the family's other philanthropic organizations, which were mainly active within the United States. Frederick Gates, Rockefeller's personal advisor and the primary administrator of his foundations, believed that disease was "the supreme ill of human life" because—in his view—it caused poverty, crime, ignorance, vice, inefficiency, and "hereditary taint." In Rockefeller's philanthropic worldview, the desire for health united rich and poor, and medical progress was one of the undeniable universal values on the planet. Rockefeller and Gates regarded tackling epidemics such as malaria, yellow fever, tuberculosis (TB), and hookworm; improving medical training; and developing public health systems around the globe based on the standards of the RF-funded centers at Johns Hopkins University or in Beijing as a way

⁵John Krige, American Hegemony and the Postwar Reconstruction of Science in Europe (Cambridge, MA, and London: The MIT Press, 2006); Charles S. Maier, "Alliance and Autonomy: European Identity and the U.S. Foreign Policy Objectives in the Truman Years," in *The Truman Presidency*, ed. Michael J. Lacey (Washington, D.C.: Woodrow Wilson International Center for Scholars and Cambridge University Press, 1989), 273–298; Ronald Doel, "Scientists as Policymakers, Advisors, and Intelligence Agents: Linking Contemporary Diplomatic History of Contemporary Science," in *The Historiography of Contemporary Science and Technology*, ed. Thomas Söderquist (Amsterdam: Harwood Academic Publishers, 1997), 215–244.

⁶RAC Gates Collection, Gates, speech at the tenth anniversary of the Rockefeller Institute of Medical Research (1911), cited here in Benjamin B. Page, "The Rockefeller Foundation and Central Europe: A Consideration," *Minerva* 40 (2002): 265–287, 281. See John Ensor Harr and Peter J. Johnson, *The Rockefeller Conscience: An American Family in Public and in Private* (New York: Scribner, 1991), 6, 502.

to spread Western civilization and its moral values (in their American variety) across Latin America, East Asia, and the Pacific.⁷

Initially, Rockefeller philanthropy did not target the western Europe of Louis Pasteur, Rudolf Virchow, and Robert Koch. It was the military devastation and social upheaval of World War I that, according to Wicliffe Rose, RF trustee and director of the International and General Education Boards in 1919, ended the existing traditions and made old Europe "ready for new seed." 8 The Foundation's first major activities in Europe set up a committee on TB prevention in Paris in 1917, soon followed by a European office for the RF, a public health program for Czechoslovakia in 1920, and a malaria prevention program in Italy in 1923.9

The Foundation's trustees and officers did not see Germany as an equally wellprepared seedbed. Rather, and despite their reservations about the militant nationalism displayed by German academics during and after the war, the RF believed that the country's medical and scientific research was a source of new ideas, not just for rebuilding postwar Europe but also for the most controversial organizational and programmatic restructuring of the Rockefellers' philanthropic empire. By the time this process ended in 1928, most of the family's philanthropic organizations had been brought together under the umbrella of the Foundation, which was divided into the five main divisions of scientific research: the International Health Division, Division of Medical Sciences, Division of Natural Sciences, Division of Social Sciences, and Division of the Humanities. 10 They reflected the RF's new philanthropic direction: "The advance of knowledge is the sailing direction." ¹¹

One man in particular, Raymond B. Fosdick, a Foundation trustee for many years and its president from 1936 to 1948, gave priority to the "science of man" rather than to education or welfare. He granted the division directors considerable scientific freedom, supported them in formulating their own areas of

On the civilizing or, more critically, the cultural-imperial mission of the public health campaigns, institutions, and educational establishments supported by Rockefeller, see Page, "The Rockefeller Foundation and Central Europe," 279–283.

*Rose to Gunn, January 21, 1919, cited in Page, "The Rockefeller Foundation and Central

Europe," 283.

On the malaria prevention campaign in Italy, see Darwin H. Stapleton, "Internationalism and Nationalism: The Rockefeller Foundation, Public Health, and Malaria in Italy, 1923-1951," Parasitologia 42 (2000): 127-134; on Czechoslovakia, see Page, "The Rockefeller Foundation and Central Europe"; on the activities of the RF in the USSR, see Susan Gross Solomon and Nikolai Krementsov, "Giving and Taking Across the Borders: The Rockefeller Foundation and Russia 1919–1928," *Minerva* 39 (2001): 265–298.

¹⁰On the reorganization of the RF during the 1920s, see Raymond B. Fosdick, The Story of the Rockefeller Foundation (New York: Harper & Brothers, 1952), (reprint New Brunswick and Oxford: Transaction Publishers, 1989), 135-144. Critical notes on the omissions from this account are given in the introduction by Steven C. Wheatley in the 1989 reprint of this volume.

¹¹According to the officiating president of the RF, Max Mason, in his Memorial Address on April 15, 1930, cited in ibid., 142.

emphasis for scientific funding, and shrugged off the objections of the founders' generation, people such as Wicliffe Rose and Abraham Flexner, about radical changes to the RF's organizational structure and programs. In this manner, "the dynamic partnership between scientists and foundation managers" developed in the RF similarly to the way they did in other large American foundations. As Robert E. Kohler has shown, it was "characteristic of the interwar decades" and differed from both the older "style of patronage" and its "small-scale, personalized social relations" and from the "more impersonal," bureaucratic "big science" structures that developed during and after World War II. 12

In several ways, scientific developments in Germany drove this restructuring. Since the launch of experimental physiology in the mid-19th century, German medical research had been at the forefront of international rankings. Richard M. Pearce, head of the Medical Education Board, and his staff viewed the uniquely close links between clinical practice, university teaching, and scientific research, both in institutional and personnel terms, as the ideal breeding ground for a rapid increase in medical knowledge and the equally rapid application of that knowledge. The German system became a model of support for medical centers in Europe and Latin America. 13 For this reason, and despite their political distance, the Foundation set up an aid program for German science in the early 1920s. The RF provided funds for the purchase of specialist international literature that institutions had not been able to obtain because of the war and high inflation, and for research grants to promising young researchers, to whom few jobs were available. The Foundation hoped these measures would help to secure the high standard of German medical research through the crisis of the postwar years. 14

During the second half of the 1920s, the Kaiser Wilhelm Society came into play in the wake of the RF's increasing focus on science in its philanthropic efforts. The KWG had been founded in 1911 in response to the crisis of the

¹²Robert E. Kohler, Partners in Science: Foundations and Natural Scientists 1900–1945 (Chicago: Chicago University Press, 1991), 233–262, quotes 404–406; Robert E. Kohler, "Warren Weaver and the Rockefeller Foundation Program in Molecular Biology: A Case Study in the Management of Science," in Managing Medical Research in Europe: The Role of the Rockefeller Foundation (1920s–1950s), ed. Giuliana Gemelli, Jean-Francois Picard, and William H. Schneider (Bologna: CLUEB, 1999), 51–90, especially 55–56; Robert E. Kohler, "A Policy for the Advancement of Science: The Rockefeller Foundation, 1924–29," Minerva 16 (1978): 480–515. On the links between the development of the major philanthropic foundations, see also Judith Sealander, Private Wealth and Public Life: Foundation Philanthropy and the Reshaping of American Social Policy from the Progressive Era to the New Deal (Baltimore, MD, and London: Johns Hopkins University Press, 1997), and Thomas Adam, ed., Philanthropy, Patronage, and Civil Society: Experiences from Germany, Great Britain, and North America (Bloomington, IN: Indiana University Press, 2004).

¹³Fosdick, *The Story of the Rockefeller Foundation*, 109–122. On the role of German medical research and teaching as a model for the RF, see also Weindling, "The Rockefeller Foundation and German Biomedical Sciences, 1920–40," 120 f.

¹⁴A detailed account of the intense debate within the RF on the aid program for Germany is given in Weindling, "The Rockefeller Foundation and German Biomedical Sciences, 1920–40," 122–128.

German university system and the simultaneous advance in American science since the turn of the century, watched nervously in Germany. The research institutes were to be funded through a mix of public funds, a foundation endowed by the Kaiser, and (it was hoped, initially realistically) through considerable donations from industry. They were to be free from university constraints and were to carry out research into areas at the boundaries of various disciplines or that lay between science and technology, providing new knowledge, regardless of whether it was immediately applicable. The Kaiser Wilhelm Institutes (KWI) for Chemistry, Biology, and Physical Chemistry, to name only the first few founded, based their structures on the Rockefeller Institute for Medical Research (RIMR), founded in 1901 and which later became the Rockefeller University in New York. 15 In other words, these were pure research institutes with the best possible equipment. The heads of the institutes were chosen carefully, were regarded as leading scientists, and were given almost total freedom to choose their own topics of study, methods, and staff. 16 Although the Society's endowment base evaporated during the inflation in the 1920s, the Reich and the German Länder took over most of the financing, so that the KWG actually continued to expand. By 1933, roughly thirty KWIs existed, and by 1945, roughly forty. The RF alone had provided most of the funding for five of them, namely the German Research Center for Psychiatry in Munich (DFA, a KWI from 1925 onward), and the four Berlin KWIs for Brain Research, Cell Physiology, Physics, and Foreign and International Private Law. 17

The natural sciences enjoyed two major interfaces between the program of the RF and the research focuses of the KWG. One lay in the area of scientific medicine. In 1930, Alan Gregg, a medical scientist, became the head of the RF's Division of Medical Sciences. He had worked in almost all of the medical programs created by Rockefeller philanthropy, but he also had broad

¹⁵On the RIMR, see the anthology edited by Darwin H. Stapleton, *Creating a Tradition of Biomedical Research: Contributions to the History of the Rockefeller University* (New York: Rockefeller University Press, 2004); on how the RIMR was a model for the KWIs, see Stapleton, "The Rockefeller (University) Effect: A Phenomenon in Biomedical Science," in ibid., 5–15, especially 7 (footnote 17).

¹⁶These were the main points included in the "Harnack principle," named after the first president of the KWG. On the history of the KWG, see Rudolf Vierhaus and Bernhard Vom Brocke, eds., Forschung im Spannungsfeld von Politik und Gesellschaft. Geschichte und Struktur der Kaiser-Wilhelm/Max-Planck-Gesellschaft (Stuttgart: DVA, 1990), and Bernhard Vom Brocke and Hubert Laitko, eds., Die Kaiser-Wilhelm/Max-Planck-Gesellschaft und ihre Institute. Studien zu ihrer Geschichte: Das Harnackprinzip (Berlin: de Gruyter, 1996).

¹⁷As an overview, see Kurt Düwell, "Die deutsch-amerikanischen Wissenschaftsbeziehungen im Spiegel der Kaiser-Wilhelm- und der Max-Planck-Gesellschaft," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke, 747–770. On the KWI for Physics, see Kristie Macrakis, "Wissenschaftsförderung durch die Rockefeller-Stiftung im 'Dritten Reich.' Die Entscheidung, das Kaiser-Wilhelm-Institut für Physik finanziell zu unterstützen, 1934–39," Geschichte und Gesellschaft 12 (1986): 348–379. On the KWI for Foreign and International Private Law, see Rolf-Ulrich Kunze, Ernst Rabel und das Kaiser-Wilhelm-Institut für ausländisches und internationales Privatrecht, 1926–1945 (Göttingen: Wallstein Verlag, 2004).

scientific training, particularly in psychiatry. He was an advocate of a holistic biomedical approach inspired by the philosophy of monism, described as "psychobiology," which postulated that the body and the spirit formed a psychosomatic unit. Gregg wanted to redefine both the disciplinary boundaries within the biological sciences and what was regarded as valid research. He wanted to integrate psychiatry into general medical and clinical practice and see doctors' problem-solving skills extended to cover communal and social areas. His psychobiological program became the unifying framework for the Rockefeller agenda of the 1930s; the Foundation proclaimed its "ultimate aim and central problem" to be the "analysis and rationalization of human behavior."

Mainly on the insistence of its trustees, the RF kept its distance from the contemporary American eugenicists who were arguing for immigration limits and sterilizations based on genetic criteria. But to a large extent, it left Gregg free to cooperate with German eugenicists, at least if they were working in the well-known Kaiser Wilhelm institutes. Gregg was enthusiastic about Emil Kraepelin's research program at the DFA (KWI) for Psychiatry in Munich because it combined chemistry, experimental genetics, physiology, demography, and genealogy with the development of a database on criminal biology and a genealogical database of the "genetically diseased." Between 1925 and 1935, the RF spent almost three million dollars on a new building and various research projects at this institute. Funding was soon cut back, however, when Ernst Rüdin, who had become director of the institute in 1931, emerged as a propagandist for Nazi racial hygiene and a coauthor of the 1933 Act on Forced Sterilization. Between 1930 and 1935, the RF supported

¹⁸For a detailed account of Gregg's psychobiological agenda, see Jack D. Pressman, "Human Understanding: Psychosomatic Medicine and the Mission of the Rockefeller Foundation," in *Greater than the Parts: Holism in Biomedicine*, 1920–1950, ed. Christopher Lawrence and George Weisz (New York: Oxford University Press, 1998), 189–208. On Gregg, see also William H. Schneider, "The Men Who Followed Flexner: Richard Pearce, Alan Gregg, and the Rockefeller Foundation Medical Divisions, 1919–1951," in *Rockefeller Philanthropy and Modern Biomedicine*, ed. Schneider, 7–60; William H. Schneider, "The Model American Foundation Officer: Alan Gregg and the Rockefeller Foundation Medical Divisions," *Minerva* 41, no. 2 (2003): 155–166.

¹⁹RAC, RG 3/906/2/19: The Medical and the Natural Sciences. 1933 Interim Report to the

¹⁹RAC, RG 3/906/2/19: The Medical and the Natural Sciences. 1933 Interim Report to the Trustees meeting, December 13, 1933, cited in Pressman, "Human Understanding," 201.

²⁰Kohler, "A Policy for the Advancement of Science," 499–501; Weindling, "The Rockefeller Foundation and German Biomedical Sciences, 1920–40," 130. On the relationship between the American and German eugenicists, see Stefan Kühl, *Die Internationale der Rassisten. Außtieg und Niedergang der internationalen Bewegung für Eugenik und Rassenlygiene im 20. Jahrhundert* (Frankfurt am Main: Campus, 1997), and more recently Edwin Black, *War against the Weak: Eugenics and America's Campaign to Create a Master Race* (New York: Thunder's Mouth Press, 2004), and Mark B. Adams, Garland Allen, and Sheila F. Weiss, "Human Heredity and Politics: A Comparative International Study of the Eugenics Record Office at Cold Spring Harbor (United States), the Kaiser Wilhelm Institute for Anthropology, Human Heredity, and Eugenics (Germany) and the Maxim Gorky Medical Genetics Institute (USSR)," in *Politics and Science in Wartime*, ed. Sachse and Walker, 232–262.

²¹Matthew Thomsen, "Mental Hygiene as an International Movement," in *International Health Organizations and Movements 1918–1939*, ed. Paul Weindling (Cambridge: Cambridge University

the creation of the "Genetic Index of the German People," which was financed by the *Notgemeinschaft der Deutschen Wissenschaft* and coordinated nationally by Eugen Fischer, director of the KWI for Anthropology, Human Genetics, and Eugenics. Between 1932 and 1935, the RF also provided funding for a project at this institute using research on twins to investigate hereditary diseases. The KWI for Brain Research was less obviously linked to Nazi racial policy, at least while led by Oskar and Cécile Vogt, who were driven out in 1937 by Nazi activists among their staff. The RF had clearly provided more than \$300,000 in 1929 for the new institute building in Berlin-Buch, together with additional funding for projects linking experimental genetics, neuropathology, and psychological research with clinical observation and therapy.²² Thus, Gregg and his division were deeply embedded in the German and international eugenic consensus of the 1920s and 1930s.²³

The RF also supported research approaches by KWG researchers that did not reflect Gregg's holistic-psychological views, which it included under the

Press, 1995), 283–304, here 292, says that this was due to public pressure and believes that Rüdin profited from the remaining funds. Cornelius Borck, however, shows that the RF was careful to ensure that Rüdin did not receive any support; the only ones who did were the Nazi-critical DFA researchers Felix Plaut and Walther Spielmeyer, whom Gregg greatly respected. See Cornelius Borck, "Mediating Philanthropy in Changing Political Circumstances: The Rockefeller Foundation's Funding for Brain Research in Germany, 1930–1950," Newsletter: Rockefeller Archive Center Reports Online 4, April 2001, http://www.rockefeller.edu/archive.ctr/racrro1a.html. On the forced sterilization issue, see Gisela Bock, Zwangssterilisationen im Nationalsozialismus. Studien zur Rassenpolitik und Frauenpolitik (Opladen: Westdt Verlag, 1986); on Rüdin's role in the Third Reich, see Matthias M. Weber, Ernst Rüdin. Eine kritische Biographie (Berlin: Springer, 1993), and a critical response in Volker Roelcke, "Programm und Praxis der psychiatrischen Genetik an der Deutschen Forschungsanstalt für Psychiatrie unter Ernst Rüdin. Zum Verhältnis von Wissenschaft, Politik und Rasse-Begriff vor und nach 1933," in Schmuhl, ed., Rassenforschung, 38–67.

²²On the RF funding of the individual KWIs, see RAC, Coll. RF, RG 2/717/310/2103, file notes including some lists prepared for Fosdick, November 19, 1945, and November 11, 1945; RG 1.1/717/4/23, Natural Science grants to KWG 1930–1938; RG 1.2/717/4/32, Weaver to Havighurst, July 28, 1947, with a number of lists. See also Weindling, "The Rockefeller Foundation and German Biomedical Sciences, 1920–40," 131–133; Düwell, "Die deutsch-amerikanischen Wissenschaftsbeziehungen," 751–757; Kohler, *Partners in Science*, 251–254. On the involvement of KWG scientists in Nazi crimes, see Sachse and Massin, "Biowissenschaftliche Forschung," and Sachse, ed., *Die Verbindung nach Auschwitz*; on the KWI for Brain Research, see Helga Satzinger, *Die Geschichte der genetisch orientierten Hirnforschung von Cécile und Oskar Vogt (1875–1962, 1870–1959) in der Zeit von 1895 bis ca. 1927* (Stuttgart: Deutscher Apotheker Verlag, 1998); Hans Walter Schmuhl, "Hirnforschung und Krankenmord. Das Kaiser-Wilhelm-Institut für Hirnforschung 1937–1945," Ergebnisse 1. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2000); Michael Hagner, "Im Pantheon der Gehirne. Die Elite- und Rassegehirnforschung von Oskar und Cécile Vogt," in *Rassenforschung*, ed. Schmuhl, 99–144; on the KWI for Anthropology, Human Genetics, and Eugenics, see Schmuhl, *Grenzüberschreitungen*.

²³On eugenic consensus in Germany, see Atina Grossmann, Reforming Sex: The German Movement for Birth Control and Abortion Reform 1920–1950 (New York: Oxford University Press, 1995); on international eugenics, see Mark B. Adams, ed., The Wellborn Science: Eugenics in Germany, France, Brazil, and Russia (New York: Oxford University Press, 1990), and Diane Paul, Controlling Human Heredity, 1865 to the Present (Atlantic Highlands, NJ: Humanities Press, 1995).

heading "rationalization of human behavior." Warren Weaver, who was appointed director of the new Division of Natural Sciences in 1932 after a four-year search, also managed to unite more reductionist bioscientific approaches with the RF's new doctrine, seemingly without conflict with Gregg. Weaver was a classical physicist who realized that modern quantum physics could no longer be resisted. He convinced the trustees with his ideas on programs that combined the new physics with biology and, with the RF's financial support, became a "scientific manager" in the area of modern molecular biology and remained so until well into the 1960s.²⁴ During the 1930s, reductionist approaches that attempted to explain life processes through physical and chemical processes were probably more popular in many bioscientific disciplines, whether psychiatry, physiology, endocrinology, or genetics, than Gregg's psychobiology. Gregg himself drew on the work of the cell physiologist Otto Warburg. In 1930, with Gregg's support, the RF approved about \$650,000 for Warburg's new KWI building in Berlin-Dahlem. Warburg had written to Gregg in 1931:

The most important problem in biology is to obtain an understanding in physiochemical terms of the processes—and the substances that take part in these processes—that occur in the normal living cell.²⁵

In the first annual report that Weaver submitted to the RF's Board of Trustees in 1933, he expanded the latter's physio-chemical perspective on biology to a perspective on society in general:

Can we unravel the tangled problem of the endocrine glands and develop a therapy for the whole hideous range of mental and physical disorders which result from glandular disturbances? Can we develop so sound and extensive a genetics that we can hope to breed in the future superior men? Can we solve the mysteries of the various vitamins so that we can nurture a race sufficiently healthy and resistant? In short, can we rationalize human behavior and create a new science of man?²⁶

²⁴Warren Weaver, Scene of Change: A Lifetime in American Science (New York: Scribner, 1970), 59–63. On Weaver's importance for the development of modern biology, see Kohler, Partners in Science, 265–391; Kohler, "Warren Weaver and the Rockefeller Foundation Program in Molecular Biology," 74; Lily E. Kay, The Molecular Vision of Life: Caltech, The Rockefeller Foundation, and the Rise of the New Biology (New York: Oxford University Press, 1993), passim. Abir-Am represents a critical opposing position: Pnina G. Abir-Am, "The Discourse of Physical Power and Biological Knowledge in the 1930s: A Reappraisal of the Rockefeller Foundation's 'Policy' in Molecular Biology," Social Studies of Science 12 (1982): 341–382; on the controversial judgment of Weaver's significance for the development of molecular biology, compare also Ditta Bartels, "The Rockefeller Foundation's Policy for Molecular Biology: Success or Failure?," Social Studies of Science 14 (1984): 238–243.

²⁵Cited in Weaver, Scene of Change, 60.

²⁶RF Annual Report, 1933, 199; see also Fosdick, *The Story of the Rockefeller Foundation*, 166. On Warburg's importance for Weaver's research program, see Weindling, "The Rockefeller Foundation and German Biomedical Sciences, 1920–40," 135.

In short, the increasing emphasis on science in American philanthropy during the 1920s brought the RF and KWG together. As part of this process, the Foundation's goal narrowed from "promoting the welfare of mankind" to the "rationalization of human behavior." Instead of education, "advancement of knowledge" became the method of choice, and thus, RF officers, who increasingly had scientific training themselves, focused their interest on their politically dubious but scientifically renowned and productive colleagues in the KWG, regardless of whether the latter inclined more toward holistic or reductionist approaches to research, or preferred their own individual combination. Between 1925 and 1930, the RF not only financed the new KWG institute buildings for Psychiatric Research in Munich and for Brain Research in Berlin-Buch, but also agreed to fund two more institute buildings for Physics and Cell Physiology in Berlin-Dahlem. In addition, they provided numerous KWG scientists with fellowships and funded projects at a variety of other KWIs with smaller "grants in aid."

The End of the Brief Dream of Science as a Unifying Force for Humanity

The rise of power of the Nazis in 1933 seriously disrupted the collaboration between the KWG and the RF, which both organizations highly valued and which was extremely lucrative for the KWG. It also presented a major challenge to the RF's basic principles of science policy, as Macrakis and Richardson have shown. ²⁷ Since its foundation, the RF had claimed to be able to ignore national boundaries. One almost mythical example was an entomologist who was researching malaria and how to control it in Central America. He assiduously collected mosquitoes between the front lines of the warring parties in a civil war during breaks in fighting, as he required the samples for his research. ²⁸

The Foundation had relatively few illusions about the nature of the Nazi regime and what it meant for the KWG. It had ample evidence: the support that Rüdin and his RF-funded DFA (KWI) for Psychiatry offered for Nazi racial policy; the dismissal of scientists (including a considerable number of former RF scholarship-holders) considered Jews according to the National Socialist Law for the Restoration of the Career Civil Service (Berufsbeamtengesetz) and the Nuremberg race laws (Rassengesetze); the campaign by Nazi activists against the politically unpopular Oskar and Cécile Vogt and their

²⁷Macrakis, "Wissenschaftsförderung durch die Rockefeller-Stiftung"; Malcolm Richardson, "Philanthropy and the Internationality of Learning: The Rockefeller Foundation and National Socialist Germany," *Minerva* 2 (1990): 21–58.

²⁸RF Annual Report, 1937, 13–15. On the idea of the political neutrality of the RF, see Page, "The Rockefeller Foundation and Central Europe," 283–286, and Richardson, "Philanthropy and the Internationality of Learning," 26, 54–55.

eventual expulsion from the KWI for Brain Research that the RF had set up for them; and the expulsion of Fritz Haber, with whom the Foundation had worked closely and who would rather resign his position as director than dismiss his Jewish coworkers as the Nazi laws required, resulting in the takeover of his KWI for Physical Chemistry by third-rate, party-loyal scientists.²⁹ As early as summer 1933 the then-president of the RF, Max Mason, traveled to Germany to familiarize himself with the political situation. He found that opinions among German scientists differed. Some hoped that the situation would soon stabilize and return to normal, and wanted the RF to help in this process; others, especially those who had been dismissed, expected the RF to protest in the strongest terms. Overall, the RF president, and to an even greater extent the staff of its Paris office, took a more pessimistic view of the developments in science policy in Germany than their non-Jewish, German counterparts with whom they spoke.³⁰ Eventually, Fosdick, who become president in 1936, concluded that there were places and times where "even collecting mosquitoes" could become impossible.³¹

Yet the RF could not make up its mind to take decisive action. As late as 1937, the Foundation still felt obliged to maintain the political neutrality that it felt was essential as the basis for its science funding around the world:

[In] the relations of the Foundation to the totalitarian states, scientific considerations alone have thus far provided the governing principle. Whether the Nazi regime or some other regime is in power would, it would seem, have no bearing on our desire to promote scientific work in these fields.³²

Equally, it felt bound to honor its existing commitments. The decision actually to release the funding that it had approved for the KWI for Cell Physiology in 1930 and for Physics in 1933 was only made after an extended and controversial

²⁹Of the roughly 150 male and female KWG employees who were let go or retired early, or whose contracts were not extended after 1933, about ten percent were driven out for political reasons. Compare the incomplete list in Schüring, *Minervas verstoßene Kinder*, 88–106, where the largest amount of dismissals were in the KWIs for Physical Chemistry (twenty-eight), Medical Research (twenty), and Biology (fourteen), whereas at the RF-supported KWIs for Psychiatry, Physics, and Cell Physiology "only" five, two, and one person, respectively, were let go. See also the commemorative book that documents all the cases of expulsion from the KWG: Reinhard Rürup, ed., *Schicksale und Karrieren. Gedenkbuch für die von den Nationalsozialisten aus der Kaiser-Wilhelm-Gesellschaft vertriebenen Forscherinnen und Forscher* (Göttingen: Wallstein Verlag, 2008).

³⁰Schüring, *Minervas verstoßene Kinder*, 111–114, points out how unclear the situation in Germany was for the RF scouts and how their judgments were clouded by their own prejudices when, for example, Mason perceived reports of persecuted scientists as "weepy tales of persecuted Jews," but those of ministry officials as moderate, and the situation as just. For the assessment of the situation in the Soviet Union where Gregg traveled in the 1920s, on the other hand, see Susan Gross Solomon, "Knowing the 'Local': Rockefeller Foundation Officers' Site Visits to Russia in the 1920s," *Slavic Review* 62, no. 4 (Winter 2003): 710–732.

³¹RF Annual Report, 1937, 15.

³²Confidential Monthly Report to the trustees dated October 1, 1937 (RAC, RG 3.1), cited in Richardson, "Philanthropy and the Internationality of Learning," 56.

internal debate and despite very justified doubts about whether the KWG would be able to abide by the conditions that it had accepted in 1934–35, that the institutes would continue to be led, long-term, by outstanding scientists without any political compromises to the Nazi regime. The American press scathingly denounced the funding decisions as support for Hitler and his anti-Jewish politics. From then on, the RF approved no new institutional funding for Germany. Until the U.S. entered the war, however, it continued to award occasional fellowships and grants in aid for projects at various KWIs and German universities if it believed that the projects were located on the cutting edge of its psychobiology and experimental biology research agenda, that "objective scholarship" seemed possible (in particular in medical and natural-science disciplines), and if the recipients had not obviously acted as propagandists for the Nazi regime. ³⁴

On the other hand, the RF also funded the largest aid program for scientists who had been expelled of all the American foundations, totaling some \$1.4 million. Overall, 303 scientists, including 26 former KWG staff, benefited from this program. The RF also insisted that scientific criteria take priority over social criteria in the selection of these fellows. As a result, many promising young scientists had better chances to receive support than scientific colleagues with less impressive credentials or even than the renowned, often demanding former KWI directors whose scientific capabilities had already peaked and for whom no adequate academic leadership position could be created in the countries to which they emigrated.³⁵

Given this ambivalent attitude during the Nazi period, especially about the question of eugenics, the dwindling pledges of funding, and the support for emigrants along predominantly scientific achievement-oriented and less social

³³The American Hebrew, February 2, 1934; New York Times, November 24, 1936; Science, December 11, 1936, 526; all indications are found in Macrakis, "Wissenschaftsförderung durch die Rockefeller-Stiftung," 372 and 374, where the critical commentary of the American public to the RF's sustained support of German science as well as the RF's reaction are represented.

³⁴These decision-making processes were described in detail first by Macrakis, "Wissenschaftsförderung durch die Rockefeller-Stiftung," and then by Richardson, "Philanthropy and the Internationality of Learning." The quote is taken from the *Confidential Monthly Report* to the trustees dated October 1, 1937 (RAC, RG 3.1), cited in Richardson, "Philanthropy and the Internationality of Learning," 57.

35Success stories as well as cases of unrealistic expectations on the part of emigrants and tragic failures can be gleaned in Schüring, Minervas verstoßene Kinder, 109–129, and Rürup, ed., Schicksale und Karrieren; see also Abir-Am, "The Discourse of Physical Power and Biological Knowledge in the 1930s," 341–382; Paul Weindling, "An Overloaded Ark? The Rockefeller Foundation and Refugee Medical Scientists," in Studies in History and Philosophy of Biology and Biomedical Sciences 3 (2000): 477–489; and Reinhard Siegmund-Schultze, "Rockefeller Support for Mathematicians Fleeing from the Nazi Purge," in The "Unacceptables": American Foundations and Refugee Scholars between the Tiwo Wars and after, ed. Giuliana Gemelli (Brussels: PIE Lang, 2000), 83–106, and further essays in Gemelli, ed., The "Unacceptables," and Mitchell Ash and Alfons Söllner, ed., Forced Migration and Scientific Change: Émigré German-Speaking Scientists and Scholars after 1933 (Washington, D.C.: Cambridge University Press, 1996).

criteria, the Foundation's officers' reservations about any new involvement by the RF in postwar Germany seem astonishing. But perhaps this very ambiguity is also the explanation for those reservations. Until 1940, the officers, particularly the division directors Weaver and Gregg, occasionally had to defend funding for German scientists against the criticism of trustees. After the war, they were in no hurry to go to Germany to gain their own impressions of the situation there, warning instead that science funding in Germany should not be restored too quickly.³⁶ It was John D. Rockefeller III himself who was the first representative of the RF to visit Germany and Austria in the summer of 1946. Thereafter, he insisted that a representative of the Foundation go on an extensive fact-finding mission to determine the general principles for the RF's future work in the two countries.³⁷ As a result, Albert Mann, who had previously been vice president of the General Education Board, went to Germany in January 1947 and traveled through the three western occupation zones. He had spent several weeks preparing himself and had been briefed by the directors of the RF's divisions, who had supplied him with lists of questions, funding provided to date, and the names of former fellows and other important people he should talk to.³⁸ He also received the report of the committee of the National Academy of Sciences, which was commissioned by Vannevar Bush of the Office for Strategic Research and Development under the leadership of Roger Adams, the chair of the Department of Chemistry at the University of Illinois, and which had recommended as early as July 1945 that the German science landscape be reconstructed, ushering in the science policy shift away from the Morgenthau Plan. The emigrant mathematician and trustworthy representative of German science Richard Courant, who transferred directly from Göttingen to New York University in 1934, had provided Mann with a list of contents. Mann, however, did not take advantage of the offer by Otto Meyerhof, the former director of the KWI for Medical Research and an RF fellow who had also emigrated, to advise him before his trip to Germany.³⁹

While in Germany, Mann conducted dozens of interviews with the staff of the occupation authorities and, in particular, with university professors and

³⁶Weindling, "'Out of the Ghetto," 213 and 219.

³⁷RAC, Coll. RFA/5/I-OMR/6/56: J. D. Rockefeller III's trip to Germany and Austria in August 1946, diary und interviews; Coll. RF, RG 1.1/717/4/21, RBF to ARM November 8, 1946: J. D. Rockefeller's eleven-point program for "possible R.F. Projects in area of dissemination and application of knowledge" in central Europe; all his suggestions focused on reeducation and developing democratic structures.

³⁸Weaver supplied the next observer with the same material: RAC, Coll. RF, RG 1.2/717/4/32: Weaver to Havighurst, July 28, 1947; RG 1.1/717/4/23: "Suggested Inquiries," compiled by A. R. Mann, December 19, 1946, and Weaver, July 1, 1947.

³⁹RAC, Coll. RF/1.1/717/4/21: Meyerhof to Robert A. Lambert, October 23, 1946; Meyerhof to Mann, November 1, 1946; Interview with Adams, December 8, 1946; Courant to Mann, December 10, 1946; Mann to EB and WW, December 13, 1946. On the roles of Adams and Courant in this context, see Krige, *American Hegemony*, 46–56.

KWG scientists that Adams und Courant had especially urged him to see. He returned to New York in February 1947, where he died immediately after his arrival and before he could edit his extensive notes.⁴⁰

The New York office of the Foundation compiled a report based on Mann's notes. It contained careful, in some cases favorable, evaluations of the scientists he had interviewed and was discussed in April 1947 at the first staff conference on the situation in Germany. During this meeting, Weaver, as the note-taker recorded, expressed himself in an "almost completely negative" manner and "with considerable emotion":

He expressed the viewpoint that any support we might give to science would be aiding the potential military strength and that we should go slow. He expressed the idea that it was impossible in aiding a scientific project to make a distinction between one of a military and one of a non-military value and cited as an illustration the work of Szent-Györgyi on Vitamin C which made possible the long-range submarine warfare during the last war. He was almost bitter towards many outstanding scientists in Germany, some of whom are mentioned favorably in Mr. Mann's report. 42

Weaver had evidently lost faith not merely in German science but in any "objective scholarship" at all. Gregg, however, pointed out that because of the world economy and European politics, "we cannot leave Germany alone and pretend she is not there." But he acted that way himself, ignoring Germany in his annual trips to Europe, which he had recommenced in 1945. It was not until 1949 that he entered the country again, and he was still so disgusted by the people he met there, who revealed themselves to him as "strangers to self-reproach and the responsibilities that attend freedom," that on leaving the country he had to vent his feelings by writing in his official diary:

It isn't that you can vomit what you have already had to eat—you can't—but at least you don't have to sit smilingly and eat more and more. 44

⁴⁰RAC, Stacks 717 PWS Mann: Report on Educational Conditions in Postwar Germany. Based on the Notes made by A. R. Mann during trip to Germany January and February 1947 (hereinafter cited as Mann report), 101–108.

⁴¹RAC, Coll. RF, RG 1.1/717/4/22: Officers' Conference, April 7, 1947.

⁴²RAC, Coll. RF, RG 1.1/717/4/22: Andrew J. Warren to Strode, April 8, 1947. Albert Szent-Györgyi (1893–1986: Nobel Prize for Medicine/Physiology 1937), RF fellow in Cambridge in 1927; from 1930, Professor of Medical and Organic Chemistry at the University of Szeged; active anti-Nazi; was given Swedish citizenship during World War II and continued working in Hungary, with the considerable support of the Swedish embassy, until he emigrated to the U.S. in 1947.

⁴³RAC, Coll. RF, RG 1.1/717/4/22: Warren to Strode, April 8, 1947.

⁴⁴RAC, Coll. RF, RG 12.1/21: entry of October 4, 1949, cited in Weindling, "Out of the Ghetto," 216.

The directors of both the Natural and Medical Science divisions were so bitter about the effects of their support for science in Nazi Germany that they were at most prepared to provide funds to purchase international scientific literature, as the Foundation had done after World War I, and perhaps to help the very youngest up-and-coming researchers. To the astonishment of his colleagues in the Humanities Division, Weaver even offered to leave Germany in their hands for the next few years. 45

The same opinion was put forward by a young and ambitious directorate assistant, Edward F. D'Arms, who had just moved to the RF's Humanities Division after spending two years with the Educational Affairs Branch of the American military government in Bavaria. He attempted to establish a reputation for himself by issuing an eleven-page criticism of the Mann report, in which he vehemently rejected the latter's criticism of the American occupational forces' policy toward the universities and research centers, and in particular of the institutional destabilization caused by an over-the-top denazification policy. He defended absolute priority being given to strict denazification and long-term reeducation, which, he claimed, had by no means been carried out to an adequate extent by General Clay, despite his public statements on the matter, and postulated "that temporary inefficiency of operations is preferable to Nazidominated efficiency."

The only person who doubted the usefulness of the occupiers' reeducation policy was Joseph Willits, the long-established director of the Social Sciences Division. He responded to the new recruit's educational ferocity with six "naïve" questions:

(1) How do you formulate in positive terms a democratically-motivated education for Germany? ... (2) How do you avoid its becoming in the eyes of the German people merely our test of "political reliability"? (3) Will this imposing of an educational philosophy ... and personnel make our system popular or hated—regardless of whether it is democratic, Nigerian, or Buddhistic? (4) How long do we propose to determine philosophy, materials, organization, and personnel? (5) What will happen when we move out? (6) I agree that the new German education must be built around people of sensitivity to human, social, and cultural values in Germany, but are we strengthening or undermining them by making them appear to be the stooges of the hated invader?⁴⁸

⁴⁵RAC, Coll. RF, RG 1.1/717/4/22: JM to David H. Stevens, dated April 11, 1947. A summary of the funding policy toward Germany and Austria is given in the *RF Annual Report*, 1948, 46–48. ⁴⁶On the criticism of the American denazification policy, see Mann report, 25, 26, 64, and 72. ⁴⁷RAC, Coll. RF, RG 1.1/717/4/22: Memorandum by Edward F. D'Arms of June 20, 1947. ⁴⁸RAC, Coll. RF, RG 1.1/717/4/22: Willits to D'Arms, July 25, 1947. On Willits, see Darwin H. Stapleton, "Joseph Willits and the Rockefellers' European Programme in the Social Sciences," *Mineria* 41 (2003): 101–114.

Despite all the debate, the RF leaders relatively quickly agreed on how to proceed. Initially, they decided to send a second person to assess the situation. Robert Havighurst, an educationalist from the University of Chicago with a background in natural sciences who had previously directed the RF's General Education Board for several years, traveled through Germany and Austria for several weeks in the autumn of 1947 and again a year later. ⁴⁹ After discussing his detailed reports, the RF laid the outlines of a future program for Germany, with a focus on youth work, education, teacher education, leader training, supplying public libraries with literature to strengthen democracy, and providing journalists and other mediators with training on democracy, mainly through international exchange programs. In other words, the measures focused mainly on reeducation, as John D. Rockefeller III had suggested in 1946. ⁵⁰

The promotion of scholarship was to take second place, with a concentration on the social sciences. With respect to the natural sciences, Havighurst recommended that the Foundation wait until the German science scene had reorganized itself and the basic needs of the population had been met to such an extent that resources such as building materials for reconstructing labs or food for experimental animals were actually available. Thanks partly to his interviews with KWG scientists, he had, however, discovered a few minor "bottlenecks," such as the lack of laboratory vessels, photographic equipment, and a variety of chemicals. Here, the RF could help quickly and effectively, with little effort, to allow interrupted research to recommence. ⁵¹

Weaver angrily rejected this idea. He doubted very much, he said, whether it would be morally justified for the RF to do anything at all in Germany. Of course it was not possible to lump all sixty million Germans together in moral terms. But for him it was an "act of faith" that the reconstruction of Germany could not be treated as "business as usual," with the usual division of labor between the various divisions. Until Germany functioned as a "democratic state in a society of nations," he could not support any activities at all in the area of the natural sciences. Least of all could Germany be given better treatment than other needy countries that had been "on the side of the angels," such as France, for which Weaver had already prepared a special funding program in

⁴⁹On Robert J. Havighurst, see Christian Fleck, *Transatlantische Bereicherungen. Zur Erfindung der empirischen Sozialforschung* (Frankfurt am Main: Suhrkamp Verlag 2007), 430–437. Havighurst's reports are contained in RAC, Coll. RF, RG 1.2/700/11/96: Havighurst report, November 24, 1947; RG 1.1/717/3/19: Interviews RJH September-October 1947; RG 1.2/700/11/95: Recommendations for Program in Germany and Austria. Robert J. Havighurst, November 1948; RG 1.2/700/11/92: RJH diary September 6–November 20, 1948.

⁵⁰RAC, Coll. RF, RG 1.1/717/3/19: Supplement to Report on Germany. Description of Possible Specific Projects.

⁵¹RAC, Coll. RF, RG 1.2/700/11/96: Havighurst report, November 24, 1947, 60–61.

1945–46.⁵² Willits felt this kind of vengefulness toward the German people as a whole was completely wrong and suggested that Weaver base his ideas not on the politics of the War Department but on the spirit of the American Quakers. This would not merely be Christian but also, in the spirit of General George Marshall's ideas, politically clever, because a prosperous Europe and a peaceful world needed a productive Germany.⁵³

In fact, the RF's program for Germany did concentrate, until the end of the 1940s, on youth work, education, and cultural issues, focusing on exchange programs and assistance for public libraries. Weaver's Natural Science Division refrained in general from providing support for German scientists, let alone for research projects or institutions, whereas the Humanities Division was most involved. At the same time, Willits's Social Science Division also worked on developing scientific contacts with West Germany and Austria, although its work mainly focused on France.⁵⁴ Despite all the political stipulations and Gregg's continued ambivalent attitude, the Medical Science Division awarded "special grants to Germany for European rehabilitation." These amounted from 1946 to 1949 to the tidy sum of about \$875,000, more than double the institutional support for French science in the same time period.⁵⁵ These grants included scholarships to young German researchers from 1946 onward, increasing to several dozen after 1948. There were also travel stipends for established scientists, some of whom would have surely disgusted Gregg if he had known about their earlier activities. One of them was Wilhelm Rudorf, director of the KWI/MPI for Plant Breeding Research, who received a travel allowance in 1949. Of all the Kaiser Wilhelm institutes, it was Rudorf's that perhaps had the highest proportion of SS members among its staff; it had employed

⁵³RAC, Coll. RF, RG 1.1/700/10/85: Willits' memorandum of November 24, 1947, and Weaver's answer of December 1, 1947, summarized in Fleck, *Transatlantische Bereicherungen*, 438f.

⁵⁴RAC, Coll. RF, RG 1.2/700/11/95: Recommendations for Program in Germany and Austria. Robert J. Havighurst, November 1948; RG 2/717–1948/428/2888: D'Arms memorandum dated November 19, 1948, on Havighurst's second report in the autumn of 1948; Schüring, Minervas verstoßene Kinder, 330. On the funding policies of the various divisions in postwar Germany and Austria, see Weindling, "Out of the Ghetto," 213–215; Paul Weindling, "Termination or Transformation? The fate of the International Health Division as a Case Study in Foundation Decision-Making," Research Reports from the Rockefeller Archive Center (Fall 2002): 20–23; Stapleton, "Joseph Willist and the Rockefellers' European Programme in the Social Sciences"; Christian Fleck, "Österreichs Wissenschaften in den Augen amerikanischer Besucher," Wiener Beiträge zur Geschichte der Neuzeit 51 (2005): 119–134.

⁵⁵The amount of support after the Nuremberg Medical Trial rose remarkably from \$62,500 in 1947 to \$455,311 in 1948, only to drop off again; from 1946 to 1951, a total of \$1.228 million was expended; numbers for Germany are from Weindling, "Out of the Ghetto," 215. In France, the National Center for Scientific Research received funds of around \$250,000, which its own administration was allowed to bestow, and a conference grant in the amount of \$100,000; see Krige, *American Hegemony*, 104–108. Whether individual stipends above that amount were bestowed directly to French scientists is not indicated there.

⁵²RAC, Coll. RF, RG 12.1/Alan Gregg/1947: Officers' Conference November 19, 1947. On the French support program, see Krige, *American Hegemony*, 75–113.

concentration camp prisoners in kok-saghys (caoutchouc, rubber) breeding at Rajsko, an auxiliary camp to Auschwitz; and it had, last but not least, been deeply involved in the agricultural and starvation policy of the General Plan for the East (*Generalplan Ost*).⁵⁶

Weaver's unusually vehement outbursts during the debates on the RF's future activities in Germany expressed his deeper concern about the destructive potential of modern natural sciences when combined with military and political power. This concern had been provoked not merely by the sins of his scientific protégés in Germany, but, to an even greater extent, by those of his American colleagues in Los Alamos. The RF's annual reports and minutes of conferences during the immediate postwar period do not contain any explicit discussions of any unintended effects that the RF's support of science and especially of eugenics in Germany may have had, even though this support continued (to a decreasing extent) right until the U.S. entered the war. But by providing fellowships for men such as Niels Bohr and Harold C. Urey, and above all by financing the "184-inch cyclotron at the University of California," which was supposed to serve only "the undiscourageable search for truth which is the noblest expression of the human spirit" when it was approved in 1940, the RF had ultimately played "an unwitting part" in the development of the atomic bomb. "

Fosdick, the president of the Foundation, devoted a long passage to the effects of the atomic bomb on the modern understanding of science in his review of the year 1946.

⁵⁶On the Rudorf grant, see Schüring, Minervas verstoßene Kinder, 330. Unfortunately, there is no complete record of KWG researchers who were members of the National Socialist Party. The KWI for Breeding Research was known for large numbers of SS members among its personnel; see Susanne Heim, Kalorien, Kautschuk und Karrieren. Pflanzenzüchtung und landwirtschaftliche Forschung in Kaiser-Wilhelm-Instituten 1933-1945 (Göttingen: Wallstein Verlag, 2003), 125-198, 209; and Michael Schüring, "Ein unerfreulicher Vorgang." Das Max-Planck-Institut für Züchtungsforschung in Voldagsen und die gescheiterte Rückkehr von Max Ufer," in Autarkie und Ostexpansion. Pflanzenzucht und Agrarforschung im Nationalsozialismus, ed. Susanne Heim (Göttingen: Wallstein Verlag, 2002), 280-299. The KWI for Anthroplogy, Eugenics, and Human Genetics was also known for large numbers of SS members; see Carola Sachse, "Persilscheinkultur.' Zum Umgang mit der NS-Vergangenheit in der Kaiser-Wilhelm/Max-Planck-Gesellschaft," in Akademische Vergangenheitspolitik. Beiträge zur Wissenschaftskultur der Nachkriegszeit, ed. Bernd Weisbrod (Göttingen: Wallstein Verlag, 2002), 223-252, and Schmuhl, Grenzüberschreitungen, 165 f, 214-222, 264-269, 360-368). A complete record of the denazification proceedings is also next to impossible because of the usual and high turnover in personnel during the last stages of the war and in the postwar years; of the forty-three directors and department heads whose proceedings are documented, twenty-eight were finally relieved, and fifteen were assessed as hangers-on, including Rudorf and the director of the KWI for Anthropology, Otmar von Verschuer, who had both cooperated directly with the concentration camp Auschwitz; see Richard H. Beyler, "Reine' Wissenschaft und personelle 'Säuberungen.' Die Kaiser-Wilhelm-/Max-Planck-Gesellschaft 1933 und 1945," Ergebnisse 16. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2004), 33 and 50.

[I]t is this same search for truth that has today brought our civilization to the edge of the abyss, and man is confronted by the tragic irony that when he has been most successful in pushing out the boundaries of knowledge, he has most endangered the possibility of human life on this planet.... In this situation what are we to do—curb our science, or cling to the pursuit of truth and run the risk of returning our society to barbarism?⁵⁸

For Fosdick, the answer to this question was, in one sense, simple: it was not science that should be curbed, but rather that war should be prevented. The world order should be altered, and "understanding," "tolerance," and "moral agreement" should be promoted. On the other hand, this "approach to a solution" seemed difficult and time-consuming. It would require the efforts of the natural scientists' colleagues in the social sciences and humanities, but would they progress with their project "to build the moral and psychological sense of the fundamental unity of mankind" fast enough to keep up with scientific and technological development?⁵⁹ In any event, any belief that "the advancement of knowledge" would immediately be used to promote "the welfare of mankind" had been lost by the end of the war, as had the whole basis for the RF's extensive cooperation with the Kaiser Wilhelm Institutes before World War II. In 1947-48, Weaver could see no other option than to avoid ever again contributing to a situation where scientific knowledge could get into the hands and minds of those who might misuse it, as the barbaric Germans had during the Second World War.

"... Our Hope: To Save Science, as Far as Possible ..."

As was the case in the German universities, few people in the KWG raised questions about German scientists' involvement in or responsibility for the racial and war crimes of the Third Reich. On April 26, 1945, the Allies arrested Otto Hahn, director of the KWI for Chemistry, who had discovered nuclear fission and was spoken of as a probable candidate for the Nobel Prize, along with nine other German nuclear researchers and brought them to Reims before the entire group was interned for six months in Farm Hall. On May 4, even before the official end of fighting in Europe, Hahn's British captor confronted him in an afternoon meeting with the real conditions that had prevailed in the Nazis' concentration camps. A few hours later Hahn jotted down in his diary a disturbing series of uncommented notes that nevertheless revealed his priorities:

⁵⁸Ibid., 1946, 7.

⁵⁹RFAnnual Report, 1946, 10–12. On the discussion of an appropriate ethical-religious establishment of the RF funding policy, see Lory Verstegen Ryan and William G. Scott, "Ethics and Organizational Reflection: The Rockefeller Foundation and Postwar 'Moral Deficits,' 1942–1954," *The Academy of Management Review* 20, no. 2 (1995): 438–461.

Concentration camps: Germans must see in films what was allowed to happen under the regime in Germany; lampshade, medical guinea pigs; our hope: to save science, as far as possible; bombing of Frankfurt.⁶⁰

The Kaiser Wilhelm institutes had succeeded to varying degrees in protecting their scientific resources. Overall, however, they had been fairly successful, especially by transferring their institutes to the west, a process that began as early as 1943.61 When Albert Mann toured the three western zones in January 1947, he visited almost a dozen of the forty or so institutes that still existed by the end of the war, focusing on those that had received funding from the RF. He ascertained that the KWIs located in the British-occupied zone enjoyed the goodwill of the controlling authorities, and that a large and active research cluster had already developed in the city of Göttingen. It included several KWIs and the Administrative Headquarters of the Society, which had relocated there and was led now by Otto Hahn, who had won the 1946 Nobel Prize in Chemistry, as president (elected with the approval of the British controlling powers), and Ernst Telschow as the long-term, shrewd general secretary. 62 Mann noted that Werner Heisenberg's KWI for Nuclear Physics and Cosmic Radiation, with its impressive range of equipment and numerous assistants, was "already a busy center," 63 but Heisenberg did not quite agree.⁶⁴ He complained to Havighurst several months later that they

⁶⁰MPG-A, Dept. III, Rep. 70, Hahn-Tagebuch 1, entry dated May 4, 1945. Ruth Lewin Sime, "Otto Hahn und die Max-Planck-Gesellschaft. Zwischen Vergangenheit und Erinnerung," Ergebnisse 14. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2004), here especially 31 has carried out a critical analysis of the sources with respect to Hahn's attitude and his policy during the postwar years.

⁶¹See the reports on the individual institutes in "Die Geschichte der Kaiser-Wilhelm-Gesellschaft und Max-Planck-Gesellschaft 1945–1949" (Göttingen: n.p., 1949), typed Festschrift to mark the seventieth birthday of Otto Hahn, MPG-A, Abt. V.c, Rep. 4, KWG Nr. 1 (hereinafter cited as FS Hahn 1949). This Festschrift was never published, probably because of a large number of phrasings that were undiplomatic, if not impudent in terms of their references to the past; see Schüring, Minerwas verstoßene Kinder, 261–268. On the transfer of the KWI, see Rüdiger Hachtmann, Wissenschaftsmanagement im "Dritten Reich." Geschichte der Generalverwaltung der Kaiser-Wilhelm-Gesellschaft, 2 vol. (Göttingen: Wallstein Verlag, 2007), vol. 2, 1027–1040.

62On Telschow and his policies, see Alexandra Przyrembel, "Friedrich Glum und Ernst Telschow. Die Generalsekretäre der Kaiser-Wilhelm-Gesellschaft: Handlungsfelder und Handlungsoptionen der 'Verwaltenden' von Wissen während des Nationalsozialismus," Ergebnisse 20. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2004); Rüdiger Hachtmann, Eine Erfolgsgeschichte? Schlaglichter auf die Geschichte der Generalverwaltung der Kaiser-Wilhelm-Gesellschaft im "Dritten Reich" (Göttingen: Wallstein Verlag, 2004); Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1126–1155.

⁶³Mann report, 50.

⁶⁴In his piece for Hahn's Festschrift, Heisenberg states that in 1949 the scientists still lacked "all larger-scale equipment such as a high-voltage facility, cyclotron, cold laboratory, uranium burner, and such things," FS Hahn 1949, 15. On Heisenberg, see David Cassidy, *Uncertainty: The Life and Science of Werner Heisenberg* (New York: Freeman, 1991); Cathryn Carson, "New Models for Science in Politics: Heisenberg in West Germany," *Historical Studies in the Physical and Biological Sciences* 30, no. 1 (1999): 115–171, and Cathryn Carson, "Heisenberg als Wissenschaftsorganisator,"

lacked equipment and therefore he and his staff had to focus mainly on theoretical physics. Overall, Heisenberg was unhappy with his new location and would have liked to travel to the U.S. for a few months, but he did not make a good impression at a dinner that the British liaison officer gave in autumn 1948 for him and two colleagues in Göttingen during Havighurst's second visit. In his overriding desire for the situation to stabilize at long last, he rejected the idea of any kind of social reforms in postwar Germany and even asserted "that there is a biological inferiority of the lower classes." In doing so he confirmed everything that the RF officers thought they had always known about the elitist class snobbery of German academics and strengthened their reluctance to give these mandarins any more funding. By contrast, Carl Friedrich von Weizsäcker took the opportunity to talk about the overdue opening-up of the universities to "children of poor families," i.e., the democratization and dehierarchization of the highly selective German educational system, as demanded by the American reeducation policy. With his thoughts on social policy, Weizsäcker recommended himself to the Americans as "a man worthy of careful attention,"65

The KWI for Brain Research also had a scientist who was described as "impressive": Alois Kornmüller. This KWI had moved its physiological department to Göttingen during the final weeks of the war, where the British had assigned it new premises in the former Aerodynamic Research Center, which now housed a number of different KWIs. 66 When Havighurst visited Kornmüller in autumn 1947, Kornmüller's assistants had just managed to construct a makeshift encephalograph and had captured two cats "and were looking forward to using them for experimental subjects." A year later, Struthers in the RF's Paris office pronounced his conviction that Kornmüller, an "amazingly brilliant, shy little person," would make Göttingen an "outstanding center" in his field despite his "rather inadequate English and French." Kornmüller's

in Werner Heisenberg 1901–1976. Beiträge, Berichte, Briefe—Festschrift zu seinem 100. Geburtstag, ed. Christian Kleint, Helmut Rechenberg, and Gerald Wiemers (Stuttgart: S. Hirzel, 2005), 214–222; Cathryn Carson and Michael Gubser, "Science Advising and Science Policy in Post-War West Germany: The Example of the deutscher Forschungsrat," Minerva 40 (2002): 147–179; Mark Walker, "Eine Waffenschmiede? Kernwaffen- und Reaktorforschung am Kaiser-Wilhelm-Institut für Physik," Ergebnisse 26. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2005).

⁶⁵RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Heisenberg, September 20, 1947; RG 1.2/700/11/92: Havighurst interviews October 19, 1948 (dinner with Werner Heisenberg, Karl Friedrich von Weizsäcker, Hermann Rein, and R. G. J. Fraser). On the elitist status thinking of German professors and some KWI directors from the RF's point of view, see Schüring, *Minervas verstoßene Kinder*, 325–328.

⁶⁶RAC, Coll. RF, RG 2-1948/717/428/2885: Struthers diary, October 19, 1948.

⁶⁷RAC, Coll. RF 1.2/700/11/96: Havighurst report 1947, 55.

⁶⁸RAC, Coll. RF, RG 2-1948/717/428/2885: Struthers diary, October 19, 1948.

own progress report conveyed the same impression. Unlike some of the other reports included in the *Festschrift für Otto Hahn* in 1949, Kornmüller's did not limit itself to lamenting the resources that had been lost, but reported on the results of important new research about the way nerve cells worked and outlined a research program for the coming years. ⁶⁹ Nevertheless, the RF refused Kornmüller's immodest request, a few months after the currency reform, for 33,000 DM for personnel and equipment, including funds to be spent on "rabbits, cats, dogs, and if possible monkeys," with a reference to the fundamental decision it still had to make on its future support for science in Germany. ⁷⁰

In the French zone of occupation, two bioscientific KWIs had located near Tübingen, which had escaped damage during the war. These institutes received support from the French military government, which had prevented troops from plundering the laboratories and had refrained from requisitioning institute buildings. Mann noted in January 1947 that the space for the numerous doctoral students and researchers at Adolf Butenandt's KWI for Biochemistry was cramped, but they had brought all their equipment, including their institute library, with them from Berlin, and the chemical industry of southwestern Germany was supplying them generously with the chemicals they needed. The monitoring officer, who had appropriate qualifications, had already supplied them with the most recent French specialist literature. The only thing that Butenandt felt was lacking was personal contact with his British and American colleagues and access to recent English-language literature, but the French officer had promised to petition the Allied Control Authority about these issues. Alfred Kühn's KWI for Biology was in a similarly favorable situation, and the two directors were working together closely. 71 When Havighurst visited Tübingen some months later, Butenandt impressed him "as being a person who calculates what he says, "not disingenuous, but always sounding out the implications of what he says":⁷²

⁶⁹FS Hahn 1949, 142-147.

⁷⁰RAC, Coll. RF, RG 2-1948/717/428/2885: MPI Hirnforschung to Struthers, November 3, 1948; Struthers to Kornmüller, November 16, 1948.

⁷¹Mann report, 48, 49, and 70. This impression is confirmed in full by Butenandt's own report: they had been able "to continue current work in the area of active ingredients, cancer research, and protein and virus research without any major interruptions" and had published forty-four articles in scholarly journals between 1945 and 1949; FS Hahn 1949, 264–268, here 265 and 268. See also Wolfgang Schieder, "Spitzenforschung und Politik. Adolf Butenandt in der Weimarer Republik und im 'Dritten Reich," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft. Wissenschaft, Industrie und Politik im "Dritten Reich," ed. Wolfgang Schieder and Achim Trunk (Göttingen: Wallstein Verlag, 2004), 23–77; Jeffrey Lewis, "Kalter Krieg in der Max-Planck-Gesellschaft. Göttingen und Tübingen—Eine Vereinigung mit Hindernissen, 1948–1949," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, 403–443; and Jean-Paul Gaudillière, "Biochemie und Industrie. Der 'Arbeitskreis Butenandt-Schering' im Nationalsozialismus," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, 198–246.

⁷²RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Butenandt, October 6, 1947. On Butenandt, see Schieder, "Spitzenforschung und Politik," in *Adolf Butenandt und die*

Butenandt seems to have things well in hand and believes that he is getting useful results in his virus research which does not duplicate the work of American researchers.⁷³

Havighurst found Kühn "a very pleasant, alert old gentleman," and in contrast to Butenandt, "totally ingenuous," and "productive as ever"; he showered Havighurst with "reprints of recent articles" and, like Butenandt, assured him that "he lost only a half day of work in his laboratory due to the French occupation." Thanks to Butenandt's and Kühn's activities in biochemistry and zoology in Tübingen, Havighurst concluded that "research is thriving in these areas."

Things were not going quite as well for the KWIs in the American zone. The American army had not consistently protected the institutes from looting and had requisitioned a large number of institute buildings for its own use. Neither of the RF's observers, Mann nor Havighurst, could avoid agreeing with the complaints of his interview partners and emphasizing on numerous occasions that the research policy of the French and British military governments was much more considerate and science-friendly than that of the Americans, with the result that the material situation of the institutes in the other zones was more favorable and research there had already recommenced, or in some instances had not been interrupted at all. 76 In addition, there were numerous bureaucratic impediments. For example, Americans had forbidden Walther Bothe of the Institute of Physics at the KWI for Medical Research in Heidelberg to use his cyclotron because they suspected that his research might have "war use value"; he had to obtain permission for any and all research, which could only be "along approved lines"; and they forbade translations of recent articles by the institute into English, and thus the institute's attempts to link up with international research, with reference to the Trading With the Enemy Act. Yet the RF observers regarded Heidelberg, which had also suffered little damage, as the major up-and-coming research center in

Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, with an extensive account of the research literature to date, and the other contributions to Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk.

⁷³Havighurst report 1947, 54.

⁷⁴RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Kühn, October 6, 1947. Kühn gave a similar account in his 1949 report, FS Hahn 1949, 285–294, here 285.

⁷⁵Havighurst report 1947, 57; on research collaboration between Kühn and Butenandt, which was funded by the RF during the early 1930s, see Hans-Jörg Rheinberger, "Die Zusammenarbeit zwischen Adolf Butenandt und Alfred Kühn," in *Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft*, ed. Schieder and Trunk, 169–197.

⁷⁶Mann report, 25, 26, 39, 61–64; Havighurst report 1947, 52, 54, 59; RAC, Coll. RF 1.2/717/

⁷⁶Mann report, 25, 26, 39, 61–64; Havighurst report 1947, 52, 54, 59; RAC, Coll. RF 1.2/717/4/32: Havighurst to Gregg, September 22, 1947; RF 1.2/700/11/95: Havighurst Recommendations 1948, chapter VII.

the American zone and found the KWI for Medical Research to be "especially active." In fact, a few weeks after Mann's visit, the Americans allowed Bothe to restart his research using his cyclotron together with the only electron microscope in Germany and a generator; the purpose was in part to produce radioactive material for medical research. Nevertheless, in his 1949 report, he described the actions of the American military authorities as a continuous succession of impertinences by ignoramuses. ⁷⁸

Of the nine KWIs that Havighurst visited during the autumn of 1947, he assessed five as already very active and promising: the KWIs for Physics (Heisenberg, Göttingen), Brain Research, or to be precise its physiological section (Kornmüller, Göttingen), Biochemistry (Butenandt, Tübingen), Biology (Kühn, Tübingen), and Biophysics (Rajewski, Frankfurt). He saw two other institutes, the KWIs for Medical Research (Kuhn and Bothe, Heidelberg) and Cell Physiology (Warburg and Knaake, Berlin), as showing signs of producing productive research in the very near future. He was more circumspect about the prospects of the remaining two institutes: the KWI for Psychology (Nachtsheim and Gottschaldt, Berlin), the successor to the KWI for Anthropology, Human Genetics, and Eugenics, whose cooperation with Mengele in Auschwitz had become known in 1946; and the DFA (KWI) for Psychiatry (Scholz, Munich).⁷⁹ Two years after the end of the war, in a country that was still in ruins, where Holocaust survivors and former forced laborers were still living in Displaced Person camps and tens of thousands in refugee camps, where hunger, shortages, the black market, and lack of housing were still characteristic of everyday life, and with the next cold winter upon them, the KWG was better off than many other areas of West German postwar society, where often the bare essentials were missing.

Campaigning on Science Policy in the Trizonal Area

The KWG's administrative headquarters had moved to Göttingen during the last few months of the war. Under the protection of the British military government, it continued its activities there as far as possible. For the headquarters' staff, however, the fact that most of its most famous institutes had been able to restart their research or in some cases had not had to stop work at all was not the most pressing issue in the immediate postwar years. For KWG president

⁷⁷Mann report, 39, 60, 61, and 69.

⁷⁸FS Hahn 1949, 164-171.

⁷⁹Havighurst report 1947, 53–61; on the KWI for Psychology, see Mitchell Ash, "The Hereditary Psychology Department of the KWI for Anthropology, Human Heredity, and Eugenics 1935–1945," in *Zur Geschichte der Psychologie in Berlin*, ed. Lothar Sprung and Wolfgang Schönpflug (Frankfurt am Main: Peter Lang, 2003), 401–428.

Otto Hahn and his general secretary Ernst Telschow, saving science meant, in the first place, saving the KWG's institutional unity.⁸⁰

In November 1945, Captain Shulits of the Public Health and Welfare Branch of the American military government had issued a request for information to the RF. He wanted to know how the RF adjudged the KWG's role during the Nazi period, in particular with regard to "the putting out of Jews" and "the adoption of Nazi policies for science." He wanted to know from a reliable source whether he would be acting correctly if, in a report requested by General Clay on the current state of science in Germany, he were to recommend that the KWG be dissolved as the umbrella organization for the various institutes. He personally viewed the KWG "as a distinct danger if allowed to continue as a central authority and the power to accumulate centralized funds and direction for running throughout Germany the organization as it existed in the past."81 The inquiry also extended to the "financial commitments on the part of the RF in its different divisions, particularly in reference to the KWG, covering the period just before Hitler's advent to the beginning of the war." Because of its political sensitivity, the request was passed onto the president of the RF himself; however, Fosdick's succinct note was "No reply."82

Shulit was able to see his "feeling" implemented even without the RF's support. ⁸³ In early August 1946, under pressure from the Americans and contrary to British wishes, the four Allied powers decided during one of their last joint sessions to dissolve the KWG. No corresponding implementation act was ever passed, however. ⁸⁴ Consequently, as Albert Mann noted in January

⁸⁰This is the substance of Telschow's report on the administrative headquarters, in FS Hahn 1949, 2–11. See also Schüring, *Minervas verstoßene Kinder*, 230–256, and Hachtmann, *Wissenschaftsmanagement im "Dritten Reich*," vol. 2, 1077–1100.

⁸¹RAC, Coll. RF, RG 2/717/310/2103: Note from DPOB to Lambert, November 9, 1945. The inquiry was presumably connected to Roger Adams's stay in Germany from November 1945 to March 1946 as an "expert consultant' to the War Department and as an official representative to the National Academy of Science," at which the foundations for the Allied Control Law 25 for the control of scientific research in Germany were developed. The law was promulgated on April 29, 1946; see Krige, *American Hegemony*, 47.

⁸²RAC, Coll. RF, RG 2/717/310/2103: Note RBF, November 19, 1945.

⁸³The KWG was informed of these events by Roger Adams, a trained chemist and a dean at the University of Illinois who was then working for General Clay in Germany as an adviser on science issues; see Manfred Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft und die Neugründungen der Max-Planck-Gesellschaft (1945–1949)," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke, 407–470, here 408. Adams was well-disposed toward the KWG and felt, as he told Mann in a preparatory meeting that the decision to dissolve the organization was "probably a mistake" because with two or three exceptions, the KWIs had not been used for war research: RAC, Coll. RF, RG 1.1/717/4/21: Mann interview with Adams, December 8, 1946.

⁸⁴The decision was made on August 2, 1946, but only put into legal form on March 27, 1947, and was never signed (i.e., it was not legally binding). In addition, the Allies disagreed about how the decision should be interpreted; see Hachtmann, *Wissenschaftsmanagement im "Dritten Reich*," vol. 2, 1089 f.

1947, there was "considerable confusion"; even in the American zone the decision of the Control Council was seen as a "burning issue against the Americans" and was regarded "as a major blunder and a serious disaster." D'Arms, the new member of the RF staff who had criticized Mann's report so strongly, and who had himself been a member of the American military government at the time of the Control Council decision, felt it necessary to defend that decision. First, he said, the "decentralization of German affairs, governmental as well as educational, wherever possible," was of paramount importance. Second, the American military government had been forced to respond to the particular situation in Berlin and to the Soviets' moves in the area of science policy (the University of Berlin was located in the Soviet sector, and the Soviets wanted to integrate the Berlin KWIs into the German Academy of Sciences which they controlled). For that reason, the Americans had pushed the plan for a Center for Advanced Studies involving the Dahlembased KWIs "as a counterbalance."

Two months later, on September 11, 1946, the Max Planck Society was founded in the British occupation zone in response to the decision of the Control Commission and with the vigorous support of the British military government. Yet it did not receive its official listing in the Register of Societies until July 1947. The plan was that as soon as the dissolution order was implemented,

⁸⁵Mann report, iii.

⁸⁶RAC, Coll. RF, RG 1.1/717/4/22: Memorandum on "Report . . ." by D'Arms, June 20, 1947, 9; Havighurst report 1947, 60. The Berlin magistrate had appointed the communist physical chemist Robert Havemann, who was persecuted by the Nazis, as acting head of the remaining KWIs in Berlin-Dahlem in summer 1945. With the backing of the Soviet military authorities, he first tried to rebuild the KWG from Berlin outward as a completely German institution. He was defeated in his efforts not only by the Allies' changing interests and their increasingly confrontational sciencepolicy strategies in the city of Berlin, which was divided into four sections, but also and most of all by the opposition of the general administration of the KWG, which had just evacuated to Göttingen at the beginning of 1945. The KWG administration began pursuing a definite orientation to the west since it found itself again under sympathetic British supremacy in April 1945, considered Havemann its main enemy, and left the remaining institutes in the "front city" of the Cold War to their uncertain fate. When the front lines in Berlin were settled in 1950, the KWG administration took charge of the institutes located in West Berlin again, while the institutes located in East Berlin and the Soviet occupation zone were transferred to various, in some cases newly founded, science associations of the German Democratic Republic (DDR). See Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke, 424-426, 434-436, 441, 454-456, and Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1059-1077.

**The delaying tactics used by the British regarding the approval of the organization as a registered society meant, of course, ongoing uncertainty for the administrative headquarters of the KWG/MPG; see Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke, 430–436 and 441. On the attitude of the British military government toward the KWG, see also Peter Alter, "Die Kaiser-Wilhelm-Gesellschaft in den deutsch-britischen Beziehungen," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke, 726–746; Otto Gerhard Oexle, "Wie in Göttingen die Max-Planck-Gesellschaft entstand," Jahrbuch 1994 der Max-Planck-Gesellschaft zur Förderung der Wissenschaften (Göttingen: Vandenhoeck & Ruprecht 1994), 43–60; Otto Gerhard

the KWIs located in the British zone would be reunited as the MPG. Over the eighteen months that followed, the administrative headquarters of the MPG, led as before by Hahn and Telschow, was occupied mainly with dissuading the western military governments from implementing the decision to dissolve the KWG and with reuniting the MPG first with the KWIs located in the American zone and then with those in the French zone. 88

During the course of these dogged attempts to preserve and reestablish its unity, these leaders reinvented the history of the KWG and developed a flexible use of the terms "pure" or "fundamental" research. They meant to defend the history of the KWG and to justify the existence of the new MPG. They exploited the RF in a variety of ways for this purpose. For example, during Mann's visit to Göttingen on January 21 and 22, 1947, he met with an "impassioned recital" by Hahn, criticizing the American denazification policy in general; the resulting headhunting of German scientists, which would, he claimed, destroy the German research scene; and the dissolution order in particular. 89 According to Mann, Hahn stated "that the American reason for killing the Gesellschaft was that it was a very big, powerful trust and a Nazi organization" but that this was completely untrue. The report on Mann's trip does not reveal how he responded or to what extent he informed Hahn about the discussions that he had had with the Research Control Section of OMGUS shortly beforehand. 90 At any rate, during the days that followed, Hahn and Telschow, who expected the dissolution order to be implemented at any moment, devoted themselves to compiling a memorandum for General Clav. 91

Oexle, "Hahn, Heisenberg und die anderen. Anmerkungen zu 'Kopenhagen,' 'Farm Hall' und 'Göttingen,'" Ergebnisse 9. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2003); a critical reaction in Sime, "Otto Hahn und die Max-Planck-Gesellschaft," and Schüring, Minervas verstoßene Kinder, 330 f.; and Hachtmann, Wissenschaftsmanagement im "Dritten Reich," 1085 f.

⁸⁸These events have been researched thoroughly; the most recent account is given in Mark Walker, "Otto Hahn. Verantwortung und Verdrängung," Ergebnisse 10. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2003), with particular focus on the role played by Hahn. See Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft," in Forschung im Spannungsfeld von Politik und Gesellschaft, ed. Vierhaus and Vom Brocke; Kristie Macrakis, Surviving the Swastika: Scientific Research in Nazi Germany (New York: Oxford University Press, 1993), 187–198, and Lewis, "Kalter Krieg in der Max-Planck-Gesellschaft," the latter mainly on the inclusion of the institutes in the French zone.

⁸⁹On Hahn's public interventions against the foreign headhunting of German scientists, see Walker, "Otto Hahn," 35–38. Mann himself was very critical of the Allies, who were poaching the best scientists from each other, and described this "traffic in brains" as a "new kind of slavery"; Mann report, 28–29.

⁹⁰Mann report, 65 and 105. Mann, who was in Berlin until January 20, 1947, and then from February 6–9, 1947, had met Dr. Nordstrom of the Research Control Section of OMGUS while he was there, and during his intervening trip, spoke with the Research Control Officer responsible for Württemberg–Baden, Lieutenant Colonel Brunton. Mann report, 60–61, 105.

⁹¹MPG Archive, Abt. II/1A/(5-5)12: Memorandum, February 14, 1947.

They started by listing the possible reasons against creating an umbrella organization for the existing KWIs, insofar as they had heard them mentioned informally. They then repudiated these accusations, using assertions that were partly true and partly, to their own knowledge, false, and in particular by carefully avoiding certain truths. First of all the KWG had not, they claimed, been a state organization, but "always a purely private organization," namely a registered society. Some of its funds had come from the state but no conditions had ever been attached to them. While Hahn may not have known it, Telschow certainly knew that some of the (greatly increased) funds provided by the state after 1933 and in particular during the war had indeed been linked to particular research requests.

Second, they claimed, the KWG had not in any sense carried out extensive war research; rather, "even during the war it continued to focus to a very large extent on fundamental research, as its tradition dictated." Where "certain" tasks related to the war economy had been carried out, these had always been of "scientific importance," too. In fact, they claimed, foreign visitors who came to Germany after the war had repeatedly been amazed how little "war work" and how much "pure research work" had been carried out. 95 By contrast, in 1943 Telschow had emphasized that of the "current forty-three research institutes," twenty-seven were acting as "weapons or defense or special units" and "were partly engaged in work decisive for the outcome of the war." Kuhn, who worked on poisons; Ludwig Prandtl, who worked on aerodynamics; and Werner Köster, a metals researcher who worked on special alloys for aircraft; were not merely KWG researchers but, like the former KWG president Albert Vögler and the general secretary Telschow himself, were high-ranking managers in the Nazi armaments machine. Like their colleagues Hahn, the chemist, and

⁹²Ibid., 1.

⁹³On the financial policy of the administrative headquarters, see Hachtmann, Eine Erfolgsgeschichte?, 9–13; Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 1, 191–258, vol. 2, 745–792, and passim. On commissioned research at the KWI for Silicate Research, see Heiko Stoff, "Eine zentrale Arbeitsstätte mit nationalen Zielen. Wilhelm Eitel und das Kaiser-Wilhelm-Institut für Silikatforschung 1926–1945," Ergebnisse 28. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2006), 30–40; at the KWI for Bast Fiber Research, see Günther Luxbacher, "Roh- und Werkstoffe für die Autarkie. Textilforschung in der Kaiser-Wilhelm-Gesellschaft," Ergebnisse 18. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2004), 38–42; at the KWI for Chemistry, see Walker, "Otto Hahn," 19–29; Florian Schmaltz, Kampfstoff-Forschung im Nationalsozialismus. Zur Kooperation von Kaiser-Wilhelm-Instituten, Militär und Industrie (Göttingen: Wallstein Verlag, 2005), chapter III.

⁹⁴MPG Archive, Abt. II/1A/(5-5)12: Memorandum February 14, 1947, 1. 95Ibid. 2

⁹⁶MPG Archive, Abt. I/1A/203: Telschow to Brandt, January 20, 1943, cited in Helmut Maier, "Wehrhaftmachung' und 'Kriegswichtigkeit.' Zur rüstungstechnologischen Relevanz des Kaiser-Wilhelm-Instituts für Metallforschung in Stuttgart vor und nach 1945," Ergebnisse 5. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2002), 16.

Butenandt, the biochemist, both of whom had procured war research assignments for their institutes, these men knew that there were no clear-cut epistemic boundaries between the projects that they liked to describe as "pure research" and those intended to be of use, sooner or later, to the armaments industry or in the war itself.⁹⁷

Third, Hahn and Telschow claimed, the KWG's administrative headquarters had in no way acted as a "research trust." Rather, it had "not [exerted] any influence at all on the institutes' scientific work" and had concerned itself only with the "correct use of funds," and with relieving the institutes of all administrative tasks. ⁹⁸ Of all the claims made, this one perhaps came closest to the truth; however, it concealed the fact that Telschow had repeatedly acted as an intermediary between the Nazi authorities and the institutes, extolling the research capacities of the KWG scientists to the former and advising the latter of the research needs of the military or the armaments industry. Together with Herbert Backe, the KWG's vice president and also undersecretary of the Reich Ministry of Food, Telschow had also pushed for the establishment of numerous agricultural research institutes that were to contribute to research on the "East" and on "Lebensraum" in the context of the "Generalplan Ost." Overall during the Third Reich, the KWG had functioned extremely

⁹⁸MPG Archive, Abt. II/1A/(5-5)12: Memorandum, February 14, 1947, 2.

⁹⁷Moritz Epple, "Rechnen, Messen, Führen. Kriegsforschung am Kaiser-Wilhelm-Institut für Strömungsforschung 1937–1945," in Rüstungsforschung im Nationalsozialismus. Organisation, Mobilisierung und Entgrenzung der Technikwissenschaften, ed. Helmut Maier (Göttingen: Wallstein Verlag, 2002), 305-356; Maier, "Wehrhaftmachung' und 'Kriegswichtigkeit"; Helmut Maier, Forschung als Waffe. Rüstungsforschung in der Kaiser-Wilhelm-Gesellschaft und das Kaiser-Wilhelm-Institut für Metallforschung 1900-1945/48, 2 vol. (Göttingen: Wallstein Verlag, 2007); Bernd Gausemeier, "An der Heimatfront. 'Kriegswichtige' Forschungen am Kaiser-Wilhelm-Institut für Biochemie," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, 134-168; Bernd Gausemeier, Natürliche Ordnungen und politische Allianzen. Biologische und biochemische Forschung an Kaiser-Wilhelm-Instituten, 1933-1945 (Göttingen: Wallstein Verlag, 2005); Schmaltz, Kampfstoff-Forschung im Nationalsozialismus. This new research from the MPS research program "History of the Kaiser Wilhelm Society in the National Socialist Era" clearly shows that the various KWIs were not divided into "black and white sheep," but rather that the crossovers between pure and applied research were fluid—and occurred in both directions. This was true in different ways for all the natural science disciplines represented in the KWG from physics and chemistry to the material sciences and the biosciences whereby the applications were just as multifaceted and could range from industrial and medicaltherapeutic implementations to the development of weapons of mass destruction and racial-political selection proceedings. The KWG was no "survivor of the Swastika," as Macrakis, Surviving the Swastika, called it in her groundbreaking-in-its-time book and that followed the self-projection of the KWP/MPG into the postwar era, but, with the continuum of its flexible research program, was rather an integral carrier of the National Socialist ruling regime. See Carola Sachse and Mark Walker, "Introduction: A Comparative Perspective," in Politics and Science in Wartime, ed. Sachse and Walker, 1-20, and Hachtmann, Wissenschaftsmanagement im "Dritten Reich"; Macrakis, Surviving the Swastika, and Kristie Macrakis, "Surviving the Swastika,' Revisited: The Kaiser-Wilhelm-Gesellschaft and Science Policy in Nazi Germany," in Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus. Bestandsaufnahme und Perspektiven der Forschung, ed. Doris Kaufmann (Göttingen: Wallstein Verlag, 2000), 586-599.

successfully as an intermediary between science on the one hand and the state, military, and industry on the other.⁹⁹

Fourth and finally, the two acted to preempt any suggestions "that the KWG had been oriented toward the National Socialists." None of its presidents had been a party member, they claimed; rather, Max Planck and Carl Bosch had been among the regime's "harshest opponents." They did not mention the party membership of the last president to hold office during the war, Albert Vögler, who had committed suicide in 1945; vice president Backe, who committed suicide in 1947 while being held in preparation for the Nuremberg trials; or general secretary Telschow himself and a considerable number of KWI directors. 101

The second part of the memorandum outlined the advantages of a central administrative unit, particularly in view of the recent bizonal economic agreement. It would reduce the burden of administrative work on the individual institutes, secure the efficient use of funds, and make it easier to monitor the Allies' restrictions on research. 102 Finally, the memorandum pointed to the high level of respect that the KWG enjoyed abroad, stating that it had gained this respect not merely because of its scientific achievements but because of its successful struggle to protect its independence. The RF was cited as a star witness:

The fact that even under the National Socialist regime, considerable funds were provided to the KWG from the U.S., e.g., Rockefeller Society, proves

⁹⁹On Telschow, see Hachtmann, Eine Erfolgsgeschichte?, and Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1126-1155, and passim; on Backe, see Heim, Kalorien, Kautschuk und Karrieren, 23-63. On the KWG's role as a mediator, see Sachse and Walker, eds., Politics and Science in Wartime, 15 f; a more general account is given in Mitchell Ash, "Wissenschaft und Politik als Ressourcen für einander," in Wissenschaften und Wissenschaftspolitik. Bestandsaufnahmen zu Formationen, Brüchen und Kontinuitäten im Deutschland des 20. Jahrhunderts, ed. Rüdiger vom Bruch and Brigitte Kaderas (Stuttgart: Steiner Verlag, 2002), 32-51.

¹⁰⁰MPG Archive, Abt. II/1A/(5-5)12: Memorandum, February 14, 1947, 2.

¹⁰¹On twenty-five KWG directors whose denazification proceedings could be reconstructed, nine were finally assessed as "hangers-on" and sixteen as "relieved"; see Beyler, "'Reine' Wissenschaft und personelle 'Säuberungen,'" 50; a comprehensive list of the KWG personnel who were members of the National Socialist Party is not available. On the construction and use of rhetorical figures in the KWG's policy on dealing with the past, see Sachse, "Persilscheinkultur"; Carola Sachse, "Wissenschaftseliten und NS-Verbrechen. Kaiser-Wilhelm-Gesellschaft und Max-Planck-Gesellschaft," in Vergangenheitspolitik in der universitären Medizin nach 1945. Institutionelle und individuelle Strategien im Umgang mit dem Nationalsozialismus, ed. Sigrid Oehler-Klein and Volker Roelcke (Stuttgart: Franz Steiner Verlag, 2007), 43-64; Heiko Stoff, "Adolf Butenandt in der Nachkriegszeit, 1945-1956, Reinigung und Assoziierung," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, 369-402; Schüring, Minervas verstoßene Kinder, 268-291; Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1156-1193. On the corresponding figures used in science policy during the postwar period in West Germany, see Mitchell Ash, "Verordnete Umbrüche-Konstruierte Kontinuitäten. Zur Entnazifizierung von Wissenschaftlern und Wissenschaften nach 1945," Zeitschrift für Geschichtswissenschaft 43 (1995): 903-923; and Weisbrod, ed., Akademische Vergangenheitspolitik.

102MPG Archive, Abt. II/1A/(5-5)12: Memorandum, February 14, 1947, 3.

that the KWG enjoyed the greatest respect in that country and that the legitimacy of its work was recognized. 103

It is noteworthy that Hahn and Telschow did not mention international relations with other countries before, during, and after the war. Indeed, contacts with Great Britain and the U.S. had weakened after 1933 and even more so after the beginning of the war. Consequently, relations with neutral countries such as Switzerland and Sweden were further cultivated and those with countries allied to Nazi Germany such as Japan, Italy, and even Hungary and Bulgaria were strengthened. 104 Moreover, the KWG attempted to use the scientific resources of the occupied countries for itself, whether it was technical equipment in the Curie Laboratory in Paris, Norwegian heavy-water plants, or the seed collections of the Vaviloff's institutes in the occupied sections of the Soviet Union. 105

Telschow presented the memorandum, signed by Hahn, to the American military government in Stuttgart in late February 1947. Colonel Brunton "found it excellent," said that he would pass it on to General Clay, and also recommended that it be submitted by all the provincial governments in the bizonal area. ¹⁰⁶ In the course of drafting a memorandum along these lines to be signed by all the *Ministerpräsidenten* (prime ministers of West German Länder), the narrative of the KWG's Nazi-era history was polished and a note was added that the Society had "tacitly" allowed "a large number of non-Aryan individuals and individuals with political difficulties" to work in the institutes. ¹⁰⁷ This campaign failed, however, because of the resistance of the Bavarian Minister for Culture and his Ministerpräsident, Hans Ehard, who would vouch for the political independence of the KWG only until 1933. ¹⁰⁸ Consequently, all of the KWG's Nobel Prize winners who had remained in Germany stepped up to the plate

¹⁰³Ibid., 4.

¹⁰⁴ As before, the KWIs invited numerous guest researchers to Germany, and KWG scientists continued to travel abroad giving talks and visiting conferences; see Ronald Doel, Dieter Hoffmann, and Nikolai Krementsov, "National States and International Science: A Comparative History of International Science Congresses in Hitler's Germany, Stalin's Russia, and Cold War United States," in Politics and Science in Wartime, ed. Sachse and Walker, 49–76; Sheila Weiss, "The Sword of our Science' as a Foreign Policy Weapon," Ergebnisse 22. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2005); Carola Sachse, "Adolf Butenandt und Otmar von Verschuer. Eine Freundschaft unter Wissenschaftlern (1942–1969)," in Adolf Butenandt und die Kaiser-Wilhelm-Gesellschaft, ed. Schieder and Trunk, 286–319; Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 793–808.

¹⁰⁵Olga Elina, Susanne Heim, and Nils Roll-Hansen, "Plant Breeding on the Front: Imperialism, War, and Exploitation," in *Politics and Science in Wartime*, ed. Sachse and Walker, 161–179; Heim, *Kalorien, Kautschuk und Karrieren*, 212–237.

 $^{^{106}}$ MPG Archive, Abt. II/1A/(5-5) 12: Note on the meeting with Col. Brunton on February 21, 1947.

<sup>21, 1947.

107</sup> Ibid.: Various versions of the memorandum, the "last final version for *Ministerpräsid.*" is dated March 12, 1947.

¹⁰⁸MPG Archive, Abt. II/1A/(5-6) 12: Ehard draft; Hahn to Min. Pfeiffer, April 8, 1947. See also Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft," 437.

and sent a joint telegram to the military governors of the western zones. The American General Clay and his British colleague Robertson replied in a friendly but reserved manner, and the French General König did not respond at all.¹⁰⁹

Thus, the situation remained unclear, but given the extension of bizonal cooperation, the chance to attain at least a bizonal reunification of the organization seemed to have increased. Telschow journeyed tirelessly up and down the country, held briefing sessions with the administration authorities in each province, and prepared further campaigns with Colonel Brunton of the American Research Control Section in Stuttgart, who was well-disposed toward the KWG. ¹¹⁰ But in the summer of 1947, Hahn and Telschow felt it necessary to obtain a promise from the directors of the institutes in the American zone that they would remain in the KWG. If they, as the American side had suggested, should prefer "to continue their work alone, independently of a central administration unit," they could expect, Hahn warned, "that they would soon be integrated into a university or put under the authority of a government agency in some form and would thus be subject to the principles of the state." ¹¹¹ Whether this warning was actually necessary is an open question, but it was certainly understood.

Each of the institute directors in the western zones with whom Havighurst met during the autumn of 1947 sang the praises of the KWG. Rajewski of the Frankfurt KWI for Biophysics considered the KWG "of the highest importance" as it would relieve him of "a load of financial administrative responsibility." Bothe and Kuhn of the Heidelberg-based KWI for Medical Research felt the former close "collaboration among the institutes" was now lacking. In Tübingen, Kühn, the zoologist, longed for "the old KWG," and Butenandt, the biochemist, hoped that under the roof of the KWG he would finally have time to work "as he pleased." While he had previously only needed half a day a month to write his reports, he now had to spend hours every day "filling out forms." He believed that the KWG had only been targeted by the Allies because of the nuclear physics research done by Hahn and Heisenberg and that it was for this reason that they had all been "condemned." 112

¹⁰⁹MPG Archive, Abt. II/1A/(5-7-1) 12: Telegram of April 1, 1947, Signed Max Planck, Otto Hahn, Adolf Butenandt, Werner Heisenberg, Richard Kuhn, Max von Laue, and Otto Warburg of the KWG, and Heinrich Wieland, Adolf Windaus, and Gerhard Domagk; Clay to Hahn, April 24, 1947; Brownjohn (Control Commission for Germany, British Element) to Hahn, May 6, 1947.

¹¹⁰MPG Archive, Abt. II/1A/(5-7-3) 12: Note "Die Lage der KWG," May 27, 1947; Abt. II/1A/(5-8-1) 12: Telschow to Hahn, June 25, 1947. On these events, see also Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft."

 $^{^{111}}$ MPG Archive, Abt. II/1A/(5–8–1) 12: Hahn to Kuhn, Bothe, Hausser, Köster, Rajewski, and Regener, June 12, 1947. 112 RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interviews (in the order cited) with Rajewski,

¹¹²RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interviews (in the order cited) with Rajewski, September 26, 1947; Bothe and Kuhn, October 9, 1947; Kühn and Butenandt, October 6, 1947; Telschow, September 20, 1947.

Havighurst himself felt his meeting with Telschow, in which the British liaison officer Fraser also took part, was the most important encounter. Telschow gave a detailed account of the progress of the negotiations on the continued existence of the KWG. He repeated the arguments given in the memoranda of spring 1947 and garlanded his account with the heartfelt declaration, though as unprovable as it was meaningless, "that the KWG actually fought Hitler more than any other scientific organization." He also outlined the basic principles on which the future Max Planck Society was to be based, namely:

(1) (F)reedom of choice by scientists of the problems on which they will work; (2) administrative work to be done by the central office of the MPG so that the directors of the various research institutes will be relieved of this responsibility; (3) freedom of the MPG from control by any political party.¹¹³

The KWG had, he said, always based its work on these principles but "the Nazi experience showed them how to protect scientific freedom and integrity better in the future." 114 Although both the director of the KWI for Cell Physiology, Otto Warburg, and colleagues in the RF had described Telschow to Havighurst as the "worst Nazi," Havighurst was inclined to trust him as an expert in his field. Havighurst could understand "how some people would distrust [Telschow's manner ..., but my net reaction to him was favorable." Three days later, at a meeting with Havighurst, Hahn reinforced the claims of his general secretary that the KWG had always been free of political influence "both during the Nazi period and in the future." As proof, he cited his own KWI for Chemistry, which had always only carried out "fundamental research," had published all its work right up until the end of the war, and had not concealed anything. Hahn did not mention that he and his staff, with their analyses of fission products, their experiments on isotope separation, and their determination of the purities of various uranium preparations, had been an integral working group in the "Uranverein" financed by the Army Weapons Office, the ultimate goal of which was, of course, the military use of nuclear energy. 116 But he did emphasize that in Fritz Strassman, with whom he had carried out and published experiments on nuclear fission in 1938, he had

¹¹³Ibid.: Havighurst interview with Telschow, September 20, 1947.

¹¹⁴Ibid.: Havighurst interview with Telschow, September 20, 1947.

¹¹⁵Mann report, 23 and 70; RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Telschow, September 20, 1947. On Warburg's ambivalent role and how the RF assessed him, see Schüring, *Minervas verstoβene Kinder*, 326–328.

¹¹⁶Walker, "Otto Hahn," 19–29, describes this work in detail, and also shows, 38–40, how this work is reinterpreted in the FIAT Reports on Fundamental Research written by Hahn; "purely scientific chemical investigation of the elements that are created during uranium fission," Otto Hahn, "Die deutschen Arbeiten über Atomkernenergie," February 2, 1946, MPG Archive Abt. III/14/G183, 5–8.

kept and protected a veritable opponent of the Nazi regime in his own institute. 117

Havighurst was impressed by the unanimous support for the KWG expressed by the ten western German KWG scientists he had interviewed, all of whom had argued forcefully for the continued existence of the organization. They left him with no doubt that the KWG would continue to be the most suitable way of organizing German research insofar as it was not taking place within industry. But to him, this did not mean recommending that the RF treat the KWG/MPG as a priority for its future program for Germany. He saw no need to provide large amounts of funding for this self-help organization for German science, which was obviously capable of carrying out its work. Quite the opposite. By the end of his sixty-day trip and the approximately 250 interviews he held, not merely with German scientists and university professors, but also with representatives of the public education system and in particular of youth work, the coordinated statements he was given by the KWG scientists reinforced his opinion that in this ruined, demoralized country, there were more important things for the RF to do. The political skills of a Telschow, the impassioned commitment of an Otto Hahn, and the hands-on attitude of a Rajewski should be enough to put the KWG and German science back on their feet through their own efforts, particularly since they could rely on the support of the British. Apart from occasional exchange scholarships for young scientists, the only institutional funding that the RF provided for the new MPG was a grant for the scientific documentation center in Göttingen, the Otto Hahn Library, with which it could "fill war gaps and [purchase] valuable periodicals and books from abroad." The MPG's first yearbook in 1951, to mark forty years of the existence of the old KWG, emphasized this grant as its most important international contact after 1945. 118

The only problem that Havighurst saw on the horizon was the unpredictable attitude of the American military government. In early September 1947, General Clay had finally signalled his willingness to negotiate with his British colleagues about a plan "for the formation of a bi-zonal association of research institutes which will be mutually acceptable."

¹¹⁷RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Hahn, October 23, 1947.

¹¹⁸H. Haevecker, "40 Jahre Kaiser-Wilhelm-Gesellschaft," in *Jahrbuch der MPG zur Förderung der Wissenschaften e.V.*, 40 Jahre Kaiser-Wilhelm-Gesellschaft zur Förderung der Wissenschaften 1911–1951 (Göttingen: 1951), 7–59, here 56. RAC, Coll. RF, RG 1.2/700/11/92, Havighurst diary 1948, 145–146: Conference with the Committee of the Max Planck Gesellschaft on the Library and Documentation Center of the Society, October 19, 1948.

¹¹⁹In a letter to Hahn dated June 7, 1947, Clay had still insisted that the KWG be dissolved. See Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1086.

¹²⁰Letter from Wilkinson (Economic Division OMGUS) dated September 5, 1947, cited in Heinemann, "Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft," 443. This letter was preceded by a meeting between Clay and Hahn on August 4, 1947, at which Hahn loudly and energetically argued the KWG's case; see Eckart Henning and Marion Kazemi, Chronik der Max-Planck-Gesellschaft zur

idea of a revival of the KWG, as he explained to Havighurst during their last meeting in late October 1947. Clay wanted research to be linked to the universities and was not in favor of a "separate research organization which could be run by the government." When Havighurst pointed out that there was a trend in the U.S. itself toward state-supported large-scale research, Clay expressed himself less ambiguously: "That is partly because we see scientific research as of military significance and for that reason we must keep the German government separated from research." ¹²¹

Telschow and Hahn's arguments that keeping the KWG/MPG as a separate organization would guarantee that research would be independent of politics were still fresh in Havighurst's mind, and he was evidently annoyed by Clay's intransigent attitude. 122 On Havighurst's last day in Germany, he held a long telephone conversation with Carl Nordstrom, chief of Research Control in the Economics Division of OMGUS and leader of the American delegation negotiating the future of the KWG. Nordstrom reassured Havighurst that after recent discussions with British colleagues and the Göttingen-based scientists, he was sure that agreement would be reached. Nordstrom had suggested only minor changes to the draft articles of association of the Society, ones that were acceptable to the German and British sides; after this, he would recommend that Clay accept the bizonal association, and he believed that in the end Clay would go along with his recommendation. 123 The negotiations that took place around the end of 1947 and the start of 1948 did indeed progress fairly quickly, and on February 26, 1948, the MPG held its inaugural meeting as a bizonal science organization.

Defining Positions in Cold-War Science Policy: An Interpretation from a Transnational Perspective

We should not misunderstand the RF observers' concern for the continued existence of the KWG in postwar Germany. We cannot tell whether they actually believed the accounts of the Nobel Prize holders, the general secretary, or the postwar president of how distant the KWG had been from politics during the Third Reich, of its resistance to Hitler, of its protection of those who had

Förderung der Wissenschaften 1948–1998, 2 vol. (Berlin: Duncker & Humblot, 1998), vol.1, 13 (entry of September 10, 1947).

¹²¹RAC, Coll. RF, RG 1.1/717/3/19: Havinghurst interview with Clay, October 28, 1947. ¹²²MPG Archive, Abt. II/1A/(5–9) 12: In a letter to Nordstrom dated October 13, 1947, Telschow had emphasized the following as basic principles of the future MPG: independence from governmental authorities, bureaucratic and political influence, and industry, and freedom in its use of funds. He had expressed them in a similar way in a letter to Havighurst on September 23, 1947.

¹²³RAC, Coll. RF, RG 1.1/717/3/19: Havinghurst interview with Nordstrom, October 31, 1947.

been denounced or ostracized, and above all of its successful defense of "pure" fundamental research. What convinced them was the concept put forward by the leading KWG representatives of a non-university-based research organization that would be largely autonomous and independent of state directives and that would offer its scientists optimal working conditions. It would thus create a way for German science to help itself and redevelop its links with the international scientific communities under its own steam.

Transnational Perceptions

There is no evidence that Havighurst wanted to exclude the KWG scientists from the "interpretive summary" that he wrote after his follow-up visit to Germany in the autumn of 1948. According to this account, the German question was and remained a moral issue of guilt. From Havighurst's observations, this issue was even less the subject of discussion in 1948, in West Germany in general, and in the universities in particular, than it had been a year previously. Given this situation, he put himself not in the role of a judge but of a probation officer who was not concerned with conviction, punishment, and remorse, but solely with the future reintegration of his "delinquent." For him, the question to ask was, "What is the healthy thing for Germany to do now about the problem of war guilt? Not what is the right thing." In theory there were two possible "courses" open to the "delinquent." One would be a self-liberating public admission of guilt; the other would be "to find his way into a new environment where moral and constructive behavior is possible and where such behavior will be rewarded by those with whom he comes into contact." The Germans had, "rightly or wrongly," chosen the second "course," he wrote. 124 In this sense, Havighurst viewed the conversion of the KWG into the new MPG and its inclusion in western cooperative structures as a step "toward the development of a healthy and peaceful and democratic German society," which he gladly supported despite his moral scruples. 125 Overall, the RF's involvement in the various reeducation programs, especially those for the international exchange of management staff in the media and education, could be seen as a contribution to "healing" post-Nazi Germany and to the creation of a "consensual hegemony" of the U.S. in the future western European science landscape. 126 From a global historical perspective, it also may be seen as a first step toward the reorganization of the RF's funding program, which was finally decided on in 1951 after several years of evaluation. In 1952, the RF's newly elected president Dean

¹²⁴RAC, Coll. RF, RG 1.2/700/11/95: Robert Havighurst, Recommendations for Program in Germany and Austria, 1948, Chapter VI.

¹²⁵Ibid.: Robert Havighurst, Recommendations for Program in Germany and Austria, 1948, Chapter VII.

126Krige, American Hegemony, 108–113.

Rusk described this reorganization, with an eye to the new field of "human ecology," as a "return to education," which was to be realized not in the construction of exemplary and expensive educational and research facilities such as the costly Kaiser Wilhelm Institutes, as had been the case in the first three decades of the twentieth century, but by using "relatively modest grants at strategic places within a faculty to strengthen its teaching," and furthermore less in Europe and more in other regions of the world. ¹²⁷

The RF's observations of the postwar German educational and science landscapes and the corresponding funding decisions can only be applied with the utmost caution to the RF's program development after 1945 because there is still no comprehensive, critical analysis of the RF's funding policies. 128 In contrast, American ideas about the role of German science and particularly of the KWG under National Socialism are reflected in stark black-and-white terms in the KWG's argumentation strategies after 1945. It is true that the KWG barely examined the issue of its own guilt or the guilt of individual members of the organization. But it could not so easily evade the question of its institutional involvement in the Nazi power system. The American occupying authorities had definite, but not always accurate, ideas about the KWG's role, and these determined its attitude toward the organization in terms of science policy. The management of the KWG rapidly developed its science-policy profile by rejecting these American ideas rather than by a self-critical process of self-analysis and, against its own better judgment, proclaimed that this new narrative also applied to the past. It promoted this profile as a condition for and a guarantee of the resurrection of German science for the future. The new corporate identity revolved around the indeterminate but impressivesounding terms "independence" and "fundamental research," countering the Americans' accusations that the KWG had been a state-managed research trust that had been mainly engaged in weapons research.

These lasting claims about "basic research" as the primary work of the old KWG and future MPG, despite all the historical evidence to the contrary, was surely also a response to the simultaneous American debate about the future relationship of science and politics in Europe. Regardless of all political security concerns, influential American politicians and scientists wanted to reconstruct the European science scene into a scientific resource of the Western World

¹²⁷RF Annual Report 1951, 24. This statement refers directly to the reorganization of the Public Health and Medical Science Division, but broadly applies to the programmatic developments in the other divisions as well.

¹²⁸ Neither the numerous important and inspiring cases studies of the promotion of specific scientific areas nor the biographical oriented portrayals by Harr and Johnson in *The Rockefeller Conscience*, Fosdick in *The Story of the Rockefeller Foundation*, or Weaver in *Scene of Change* produce such an overdue comprehensive analysis. Without such an analysis, the correlation of individual provincial and/or theme-specific promotional programs and of the corresponding science policy decisions on the RF's changing program in the global political context remains somewhat speculative.

and as an ideological bulwark against communism. Precisely those influential figures believed that they could not avoid arguing about the difference between basic and applied science, even if most clearly understood the untenable nature of the difference in everyday science. Only this conceptual construction made the hoped-for advantages of European support for science stand out and diminished arguments about the risks of renewed military armament and the continued dissemination of nuclear know-how up to the availability of the atom bomb. The KWG representatives quickly adopted the new rhetoric. Few of the KWG/MPG scientists interviewed by the RF hoped that their rich American visitors would fund their own research projects directly. Rather, they saw them as influential and well-informed intermediaries who could convince the American occupying powers of the need to maintain the institutional unity of this elite scientific organization. The RF observers willingly took on this role, even if their reasons were different from the KWG's.

Positions on a Fragmented German Nation

Despite all its reservations about the links between science and politics in the Third Reich, by 1947/48 the RF had concluded—as had the science-policy advisors of the U.S. government, Adams and Courant, who had traveled to Germany before the RF representatives—that a restabilized Germany was indispensable for the reconstruction of war-torn Europe and that in the new Cold War, West Germany was needed as a bulwark against communism. A functioning scientific-research system was an essential part of that, and the MPG seemed to offer an excellent cornerstone. Given this fundamental position, the RF observers listened with an open mind to the criticism that their German interviewees expressed about the American occupying authorities' science policy. But they in no way saw it as the RF's job to get involved. Instead they merely communicated the German criticisms to their American colleagues and made it clear that in their opinion, it was an important part of the military government's responsibilities to redevelop scientific research in the American zone or at least immediately cease to get in the way of such redevelopment. At the same time, the RF was careful not to appear to be the government's lackey. If it was to be active in Germany at all, then it should limit its activity to realms that would compromise its independence as little as possible and not jeopardize its room for maneuver in Cold-War Europe. 130

¹²⁹Krige, American Hegemony, 8-14.

¹³⁰ Since, two years after the end of the war, the RF had not yet managed to decide on a program for Germany, at Havighurst's farewell visit to the American headquarters in October 1947, he was greeted by General Clay with the smug hope "that before long the RF would *do something* in Germany besides merely sending observers." RAC, Coll. RF, RG 1.1/717/3/19: Havighurst interview with Clay on October 28, 1947; emphasis in the original.

From 1943 onward, with the relocation of its institutes, the KWG had increasingly centered itself in western Germany; it had definitively positioned itself there in February 1945 when its administrative headquarters moved to Göttingen. But the institutes had scarcely been registered and a provisional administration set up when the Society leadership found itself fighting for the institutional unity of its elite science organization, which was being questioned not only by the American (and French) military governments but also by some West German university academics who resented the KWG/MPG's privileged status. This discourse frequently employed the arguments of "independence," scientific "autonomy," and politically inviolable "fundamental research." But very few statements linked the "fundamental research" to be carried out by the future MPG with the political and economic reconstruction needed for West Germany as part of western Europe. Rather, the KWG representatives took great pains not to comment on German and European political discussions, at least not on the level of taking a public position. They held back on the volatile Berlin question and their material resources that were directly affected by it. In fact, they tended to see the Berlin institutes, which had been financed to a great extent by the RF, as a political and administrative burden that should be cast off as soon as possible. 131 The MPG was concerned with its own institutional existence and with developing a secure base in western Germany, whence, at the appropriate time, it would be able to redevelop its links to the international scientific communities.

Transnational Actors

The differences between the RF and KWG's positions regarding German affairs are also apparent in the organizations' stances in the global context after the end of World War II. As early as 1945, the RF began to engage in a process of discussion and evaluation that lasted several years and culminated in 1951 with a far-reaching organizational restructuring and a new funding policy and program. The objective of this discussion process was to define the RF's place in the new Cold-War world order and to investigate the ways in which it could continue to be active worldwide in this new situation, as called for by its ambitious purpose, "to promote the wellbeing of mankind." Two concerns determined the direction that should be taken. On the one hand, the RF had to draw a balance between institutional autonomy and entanglement in the power of the U.S. to shape world politics. The relationship between the RF and the State Department had always been close. There were frequent meetings, management-level staff moved back and forth between the two institutions, members of the Rockefeller family had direct access to the U.S. president,

¹³¹See Hachtmann, Wissenschaftsmanagement im "Dritten Reich," vol. 2, 1065, 1075-1080.

and, of course, all the visits made to postwar Germany by RF observers had the logistical support of the American military government. But just as the RF did not want to be the military government's tool, it did not want to appear to be an appendage of the State Department. ¹³²

On the other hand, the RF also sought to ensure that its own funding profile maintained its own separate identity given the major changes that had taken place in science policy structures during and because of the war, particularly in the U.S. The structures of government-funded "big science" had moved into the foreground in many areas, including nuclear research and technology, and the RF found itself both unable and unwilling to compete with them. The biological sciences, too, now obtained considerably higher amounts of funding from newly created U.S. government funds. By the early 1950s, these already exceeded by more than twelve times the funds provided by the RF for experimental biology. For these reasons, the RF began to look for "another job in pioneering," and as a result, the KWG/MPG moved even further out of their funding policy focus. ¹³³ In the RF's new program, finalized in 1951, regions outside North America and Europe would play a much more important role in the future, and the RF would focus more strongly on its newly defined philanthropic objective of "human ecology." ¹³⁴

The KWG faced completely different problems during the immediate postwar years. With the end of the war, it had lost its secure national base from which it could have cultivated equal transnational and international relations. At the same time, many KWG scientists had numerous transatlantic contacts that, even with the change in the balance of power, resembled those from which the KWG had profited during the war in the countries occupied by Germany. ¹³⁵ In some institutes, there was a revolving door of both scientific and military investigation teams that frequently took with them whatever scientific results, equipment, and even staff seemed of use and/or dangerous. They were rarely cooperative. The national border had to be clearly marked out again before it would be possible to move beyond it. Thus it is unsurprising that, in a shattered national field of reference that was only slowly reconstituting itself, the leading representatives of the KWG were initially concerned narrowly with saving the organizational unity of their society, at least in the three western

¹³²Krige, American Hegemony, 75 f., similarly described the role of foundations in postwar France and especially showed how the political independence demanded by the RF was provoked by the official American anti-Communism of the 1950s, 115–151.

¹³³RF Annual Report 1951, 35–41 (quote: 41).

¹³⁴RF Annual Report 1951: President's Review for 1950 and 1951, 5–98, passim.

¹³⁵On the appropriation of scientific resources in the occupied countries and on the use of forced scientific labor by KWG research institutes, see Heim, Kalorien, Kautschuk und Karrieren, 152–193, 212–237, and Bernhard Strebel and Jens-Christian Wagner, "Zwangsarbeit für die Forschungseinrichtungen der Kaiser-Wilhelm-Gesellschaft 1939–1945," Ergebnisse 11. Vorabdrucke aus dem Forschungsprogramm "Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus" (Berlin: 2003).

zones of occupation, and then, during the establishment of the Federal Republic, with recreating the status quo ante as far as possible. At the same time, they were concerned with no more (and no less) than maintaining their privileged status within the new federal German science and educational system and their equally privileged access to national resources for the promotion of science. They referred to international scientific competition as a justification for their political and financial demands, and they even used the modest book donations from the renowned RF as evidence of the highest international recognition, even though, for some years to come, access to the international scientific communities was possible only through the back door.

What Research, to What End, in a Divided World?

The RF viewed the following facts as a call for a public discussion about the opportunities and dangers presented by scientific research and of the risks attached to its funding: the destructive potential of the weapons of mass destruction that had been developed with the most innovative scientific know-how and used during World War II, and the briefness of the interlude between the discovery of nuclear fission in the Dahlem KWI for Chemistry in autumn 1939 and the completion of the first atomic bombs in Los Alamos in summer 1945. The officers and trustees of the RF could not find any solution to this dilemma. But neither did they decide to withdraw from funding natural science research altogether and to concentrate exclusively on the social sciences and humanities, or on humanitarian projects; however, they did reverse the relationship between science and philanthropy. In the late 1920s, the "promotion of scientific progress" had been equated with the "promotion of the wellbeing of mankind." The new 1951 program, instead, mapped out a clearcut political program of global philanthropy that would link the programs in all the divisions and guide the selection of scientific projects to be funded. They understood "human ecology" as controlling global population growth by understanding all the social, medical, and cultural factors affecting it. The program also stipulated that increased attention should be given to the "promotion of scientific agriculture," particularly in the form of practical projects. One existing focus, "experimental biology," was to be scaled back, because "the old idea that biophysics and biochemistry would eventually unravel all the problems of health and disease is less tenable today than was the case forty or fifty years ago."136

The focus areas for funding in the other two divisions (social sciences and humanities), such as the "development of a science of social behavior," "means and processes of communication," "intercultural understanding," and

¹³⁶RF Annual Report 1951: President's Review for 1950 and 1951, 30.

"humane values," were also related to the overall concept of "human ecology." This new program, which played a major role in establishing the world's population growth as a crisis scenario with the threat of "overpopulation," had serious humanitarian risks and side effects, but that is a separate chapter of the transnational history of science, as is the question of possible content and personnel continuities of the eugenic-oriented research of the 1920s and 1930s, up to the human ecological research program of the 1950s and 1960s. ¹³⁷ Here in this article, we can merely state that the RF developed a global program focusing mainly on human ecology arguments, with which it hoped to adapt its philanthropic task to the political conditions of the Cold War and to make its contribution to the pax americana.

One central difference between the RF and KWG's explanations for their actions in terms of science politics must not be overlooked. The RF sought a coherent concept to justify the way it spent its considerable funds to the American public, to the public in the receiving countries, and to financial auditors. The KWG looked for arguments to justify first its very existence, and a short time later, its continually increasing need for funds to the state providers of funding in the Federal Republic; yet it also wanted arguments that would allow it to limit as much as possible political influence on and financial control over how public monies from the federal government and the individual Länder were spent. The arguments it had developed to counter Allied, especially American, reservations against it fit these domestic needs perfectly.

The American accusation that after 1933 the KWG gave up its autonomy and was steered by the Nazi regime proved to be extremely useful for underlining the MPG's demand for as much institutional and scientific independence as possible in its dealings with German federal science politicians and supervisory authorities. At the end of this process, the MPG was more autonomous than it had ever been. The defensive argument used in the immediate postwar years that the Society had always been the home of "fundamental research" and that it did not intend to change this in the future became the MPG's founding myth, one that still echoes today. It remained intentionally unclear how "fundamental research" differed from any other kind of research. In fact, the KWIs set up before World War I had deliberately been located at the boundaries between academic research and research focused on industrial applications. Until 1945, cooperation between KWIs and industrial research laboratories was common and encouraged. The KWG's bodies, including the boards of trustees for the individual KWIs, had always included numerous representatives from industry, and not by accident. Even after 1945, no major changes occurred in this

¹³⁷On the personnel and content continuities in the German population science, see Susanne Heim and Ulrike Schaz, *Berechnung und Beschwörung. Überbevölkerung—Kritik einer Debatte* (Berlin: Verl. d. Buchläden Schwarze Risse, 1996), 91–137; on the role of the RF and especially John D. Rockefeller III in the international population policy after World War II, see ibid., 146–173.

regard, but because the KWG had used the argument of "fundamental research" so extensively during its confrontations with the American military government, with the agreement of the Society's British protectors, it had to maintain appearances. The British military government therefore recommended that no industry representatives be invited to the inaugural meeting of the MPG in the British zone, held in September 1946. Hahn, designated MPG president, explained this as follows:

The Society should apparently avoid being linked with industry even at its very start. Yet, it is very much wished that immediately after its foundation, important representatives of industry should join and, where appropriate, become members of the Senate. ¹³⁸

During the years that followed, an intention to slim the MPG down to its "core areas" of "fundamental research" was occasionally expressed. But in fact, almost all the institutes that had escaped to or were already located in the west, including those set up during the war, continued to exist. It was only when some of their directors, who had continued on in their posts, began to retire beginning in the mid-1950s that a couple of the MPIs were closed or restructured. To borrow the wise remark made by Warren Weaver in his later years that "science is what scientists do," one might say that fundamental research is whatever is done under the umbrella of the MPG.

The transnational perspective used here makes the following points more evident than they would have been in a purely bilateral reconstruction: the relationship between the RF as one of the major American foundations that supported research in the natural sciences around the globe in the framework of its changing philanthropic goals, and the KWG/MPG as the biggest German institution for research in the natural sciences was, even in the early postwar years, determined less by an evaluation of the immediate Nazi-dominated past and more by the new world order that had developed as a result of the devastating war started and ultimately lost by Nazi Germany. The American protagonists occasionally expressed their horror at the Nazi crimes and their revulsion toward the maudlin yet stubborn Germans, as Hannah Arendt has described them, ¹⁴⁰ but neither side initiated any kind of more profound reflections on the participation of German scientists in the Nazi regime and the importance of their research for that regime. Instead, both sides focused on positioning their institutions in the new Cold-War world.

¹³⁸MPG-A, Abt. II, Rep. 1A, Nr. 4, 2–10: Hahn to Prälat Schreiber on September 2, 1946. Nevertheless, a number of representatives of industry took part in the inaugural meeting in Bad Driburg on September 11, 1946.

¹³⁹Weaver, Scene of Change, 184.

¹⁴⁰Hannah Arendt, "Besuch in Deutschland. Die Nachwirkungen des Nazi-Regimes," in Hannah Arendt, *Zur Zeit. Politische Essays*, ed. Marie Luise Knott (Hamburg: Rotbuch-Verlag, 1999), 43–70 (first published in English in 1950).

The RF had a short phase of self-criticism regarding its own unintended involvement in the development of nuclear weapons of mass destruction in the U.S., but then moved forward to the new task of regulating the world's population and optimizing its nutrition. The inhuman implications of that vision might been recognized through a more detailed evaluation of the RF's former funding of research by KWG scientists during the Third Reich into "race hygiene" and genetics, which might have given some pause for thought. The fact that it was the breeding researcher and former SS-member Rudorf who received one of the few grants given to the MPG at all is thus, perhaps, less ironic than symptomatic.

The KWG/MPG, on the other hand, used its reinterpretation of its Nazi past not merely to secure its institutional unity in the western German nation but also for its future positioning in the West German science landscape. The term "pure" and "independent" "basic research" that had always been at home in the KWG and would continue to be in the future in the MPG, aligned with American discourse at the time and thus was used extensively. If the American military government could be dissuaded from its original plan to dissolve the KWG and transfer its research to the universities, then it was thanks in great part to British support and the recommendation of the RF observers and other American science policy makers who wanted to maintain the prestigious institution of top-quality German research in and for Europe. 141 Last but not least, it was also thanks to the new positioning of the MPG as a treasure of West German "basic" science. This strict conceptual dissociation of applied science—regardless of all earlier and future border crossings into practical research—provided the necessary reference for American science discourse in the atomic age. From that point of view, the history of the strange and wondrous salvaging of the KWG/MPG can also be read as a case study for the functioning of "consensual hegemony" of the U.S. in the postwar reconstruction of science in Germany. 142

Institut für Zeitgeschichte (Institute for Contemporary History), University of Vienna

¹⁴¹On the role of the British supporters of the KWG, see Otto Gerhard Oexle, *The British Roots of the Max Planck Society* (London: German Historical Institute, 1995); Oexle, "Hahn, Heisenberg und die anderen," 27–41; and for a critique of it, see Sime, "Otto Hahn und die Max-Planck-Gesellschaft," 39–41, and finally Hachtmann, *Wissenschaftsmanagement im "Dritten Reich*," vol. 2, 1085–1100.

¹⁴² According to Krige, American Hegemony, 269, it does not depend on the fact that the concrete science policy plans of the U.S. in Europe actually let themselves be changed, but "that America's scientific accomplishments remained an omnipresent point of reference and a constant source of pressure for change in Europe, while U.S. recognition of European achievement was an essential source of scientific credibility and scientific capital."